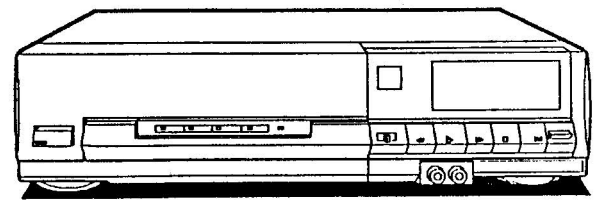
S/M Code No.91 - 053 DATE OF ISSUE 5/1991 - I

AIWA®

HV-MG300

SERVICE MANUAL



VIDEO CASSETTE RECORDER

• BASIC VIDEO MECHANISM : TN - 5900 • TYPE. SH,KE

[PRELIMINARY]

TENTATIVE USE ONLY

AIWA Co., Ltd. Tokyo Japan

Printed in Japan

SPECIFICATIONS

Recording/playback system
Video: Rotary 2 heads helical scan system
Audio: Fixed head
Video signal
PAL/MESECAM color signal 625 lines, 50 fields
$NTSC_{3.58}$/$NTSC_{4.43}$ color signal 525 lines, 60 fields
Recording/playback time
4 hours max. with E-240 tape (PAL/MESECAM), 2 hours 40 minutes max. with T-160 tape (NTSC) standard speed
Fast forward/rewind time
Less than 300 sec., with E-180 tape
Tape speed (Standard speed)
PAL/MESECAM: 23.39 mm/sec.
NTSC: 33.35 mm/sec.
Tape width
12.65 mm
Usable cassette
VHS video cassette
Timer display
24-hour cycle, day, hour, minute, digital fluorescent display

Timer recording
6 programs within 2 weeks
1 program for weekly recording
Channel coverage
VHF: I1–E4 and E5–E12 channels
UHF: 21–69 channels
RF output
UHF channel between 30 and 39
RF output level
75 dB ±3 dB
Video input
0.5–2.0 Vp-p, 75 ohms unbalanced
Video output
1.0 Vp-p, 75 ohms unbalanced
Horizontal resolution
PAL/MESECAM:
240 lines (nominal)
NTSC: 230 lines (nominal)

Video S/N (luminance)
43 dB (nominal)
Audio input
–10 dBs (nominal)
Audio output
–8 dBs, 2.2 k ohms
Audio frequency response
200 Hz – 8 kHz
Audio S/N
41 dB (nominal)
Operating temperature
5°C – 40°C
Power requirements
110–240 V AC, 50/60 Hz
Power consumption
29 watts
Dimensions
380 (W) × 96 (H) × 328 (D) mm
(15 × 3⅞ × 13 inches)
Weight Approx. 5.3 kg (11 lb 11 oz)

(Without SPECIFICATIONS of KE model)

- **Design and specifications are subject to change without notice.**

■ ACCESSORIES/PACKAGE LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q,TY
	1	★80-JU4-901-010	INSTRUCTION BOOKLET,SH	※	1
	2	★80-JU4-903-010	INSTRUCTION BOOKLET,KE	※	1
	3	★87-034-594-010	AC CORDSET,E		1
	4	★80-JU4-670-010	REMOTE UNIT,RC – TMG300	※	1
	5	★87-034-593-010	CORD,RF PAL		1

ELECTRICAL MAIN PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
=== IC ===		
	S0-051-C02-030	IC,AN7805
	87-001-632-010	IC,BA10393N
	87-001-853-010	IC,BA6209-V3
	87-001-777-010	IC,BA6219B
	87-002-339-010	IC,BA7252S
	87-001-966-010	IC,BR93C46
	87-001-939-010	IC,CXL5001P
	$87-002-485-080	IC,CXL5003M
	87-001-937-010	IC,CXL5003P
	87	IC,HA17431P
	80-JUB-653-010	IC,HD404302A21S
	80-JUB-652-010	IC,HD49754NT
	87-002-302-080	IC,HD74HC221FP
	87	IC,IB100
	$87-002-378-080	IC,L5631
	87-001-970-010	IC,LA7297
	87-001-938-010	IC,LA7311
	87-001-773-010	IC,LA7323
	87-001-901-010	IC,LA7333
	87-001-980-010	IC,LA7913
	87-002-295-010	IC,LH2464-10
	87-002-304-080	IC,M51271FP
	87-001-712-080	IC,M74HC08FP
	87-002-299-080	IC,MB40776 FPT
	87-002-300-080	IC,MB40778 FPT
	80-JU4-700-010	IC,MB87813
	80-JUB-658-010	IC,MB88515B-1359K
	87-002-369-010	IC,MM1021
	87-002-449-010	IC,NJM2233BS
	87-001-830-010	IC,NJM2234S
	87-002-273-080	IC,NJM2246M
	87-002-384-010	IC,NJM2246S
	87-020-969-010	IC,NJM78M09
	87	IC,PQ05F21
	87-020-923-080	IC,PST523D
	87-001-790-010	IC,SBX1610-52(REMOTE SENSOR)
	87-027-564-010	IC,TC4011BP
	$87-002-567-080	IC,TC4030BF
	87-027-723-010	IC,TC4049BP
	87-027-656-010	IC,TC4066BP
	87-002-298-080	IC,TC74HC00AF
	87-002-329-080	IC,TC74HC02AF
	87-001-794-080	IC,TC74HC157F
	87-001-668-080	IC,TC74HC4053 AF
	87-001-604-080	IC,TC74HCU04F
	$87-002-528-080	IC,TC7W04F
	87-002-305-080	IC,UPC661G
	80-JU4-626-010	IC,UPD75212ACW-246
=== TRANSISTOR ===		
	87	TRANSISTOR,2SK903
	87-026-452-080	TRANSISTOR,2SA933S SR
	87-026-462-080	TRANSISTOR,2SC1740S RS
	87-026-463-080	TRANSISTOR,2SA933S RS
	89-111-625-080	TRANSISTOR,2SA1162GR
	89-207-334-010	TRANSISTOR,2SB733U4
	89-322-746-080	TRANSISTOR,2SC2274F
	89-327-125-080	TRANSISTOR,2SC2712GR
	89-347-296-080	TRANSISTOR,2SC4729S
	87-026-219-080	TRANSISTOR,DTA144ES
	87-026-235-080	TRANSISTOR,DTC114EK
	87-026-217-080	TRANSISTOR,DTC124ES

REF.NO.	PART NO.	DESCRIPTION
	87-026-287-080	TRANSISTOR,DTC143ES
	87-026-210-080	TRANSISTOR,DTC144EK
	87-026-218-080	TRANSISTOR,DTC144ES
	87-026-502-080	TRANSISTOR,DTC144TS
=== DIODE ===		
	87-020-465-080	DIODE,1SS133
		DIODE,1SS270
	87-020-027-080	DIODE,CH1P 1SS184
	87-001-995-080	DIODE,DIN L20
		DIODE,EG01C
		DIODE,ERB83-006
	S0-05D-001-010	DIODE,S1WBA60
	S0-050-002-010	DIODE,S3LA20-04P15
	87-027-329-080	DIODE,ZENER HZ22-3L
	87-027-416-080	DIODE,ZENER HZ3C2
	87-027-584-080	DIODE,ZENER HZ9C1L
	S1-9A0-D02-070	DIODE,ZENER RD24F-B2
		DIODE,ZENER RD3.6E5
=== MAIN CIRCUIT BOARD SECTION ===		
C401	$87-015-677-080	CAP,ELECT 100-6.3 7L
C402	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C403	$87-010-403-080	CAP,ELECT 3.3-50 SME
C404	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C405	$87-010-405-080	CAP,ELECT 10-50 SME
C406	$87-010-405-080	CAP,ELECT 10-50 SME
C407	$87-010-402-080	CAP,ELECT 2.2-50 SME
C408	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C411	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C412	$87-018-143-080	CAP,CERA-SOL U 4.7P-50 CH
C413	$87-018-126-080	CAP,CERA-SOL U 390P-50 B
C415	$87-018-149-080	CAP,CERA-SOL U 15P-50 CH
C416	$87-010-855-080	CAP,ELECT BP 0.47-50 SME
C417	$87-010-855-080	CAP,ELECT BP 0.47-50 SME
C418	$87-010-793-080	CAP,ELECT BP 0.47-50 SRA
C420	$87-018-119-080	CAP,CERA-SOL U 100P-50 B
C421	$87-018-119-080	CAP,CERA-SOL U 100P-50 B
C422	$87-018-115-080	CAP,CERA-SOL U 47P-50 SL
C424	$87-018-122-080	CAP,CERA-SOL U 180P-50 B
C426	$87-018-124-080	CAP,CERA-SOL U 270P-50 B
C431	$87-018-213-080	CAP,CERA-SOL U 0.047-50 F
C432	$87-018-125-080	CAP,CERA-SOL U 330P-50 B
C433	$87-018-117-080	CAP,CERA-SOL U 68P-50 SL
C434	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C441	$87-010-374-080	CAP,ELECT 47-10
C442	$87-010-374-080	CAP,ELECT 47-10
C443	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C444	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C445	$87-018-110-080	CAP,CERA-SOL U 24P-50 SL
C446	$87-018-118-080	CAP,CERA-SOL U 82P-50 B
C447	$87-018-110-080	CAP,CERA-SOL U 24P-50 SL
C448	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C449	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C450	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C451	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C452	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C453	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C454	$87-018-109-080	CAP,CERA-SOL U 22P-50 SL
C455	$87-018-117-080	CAP,CERA-SOL U 68P-50 SL
C456	$87-018-109-080	CAP,CERA-SOL U 22P-50 SL
C457	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C458	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C459	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y

REF.NO.	PART NO.	DESCRIPTION
C460	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C461	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C462	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C463	$87-010-382-080	CAP,ELECT 22-25 SME
C465	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C466	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C467	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C468	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C469	$87-010-263-080	CAP,ELECT 100-10
C470	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C473	$87-010-384-080	CAP,ELECT 100-25 SME
C474	$87-018-107-080	CAP,CERA-SOL U 18P-50 SL
C475	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C476	$87-018-114-080	CAP,CERA-SOL U 39P-50 SL
C477	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C478	$87-018-121-080	CAP,CERA-SOL U 150P-50 B
C479	$87-018-113-080	CAP,CERA-SOL U 33P-50 SL
C480	$87-018-121-080	CAP,CERA-SOL U 150P-50 B
C481	$87-018-125-080	CAP,CERA-SOL U 330P-50 B
C482	$87-018-107-080	CAP,CERA-SOL U 18P-50 SL
C483	$87-018-116-080	CAP,CERA-SOL U 56P-50 SL
C484	$87-018-107-080	CAP,CERA-SOL U 18P-50 SL
C486	$87-010-384-080	CAP,ELECT 100-25 SME
C487	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C488	$87-010-263-080	CAP,ELECT 100-10
C489	$87-010-371-080	CAP,ELECT 470-6.3
C490	$87-010-374-080	CAP,ELECT 47-10
C492	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C493	$87-010-374-080	CAP,ELECT 47-10
C494	$87-010-263-080	CAP,ELECT 100-10
C495	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C496	$87-018-116-080	CAP,CERA-SOL U 47P-50 SL
C497	$87-010-374-080	CAP,ELECT 47-10
C498	$87-010-405-080	CAP,ELECT 10-50 SME
C499	$87-010-374-080	CAP,ELECT 47-10
C501	$87-010-374-080	CAP,ELECT 47-10
C502	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C503	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C504	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C505	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C506	$87-010-401-080	CAP,ELECT 1-50 SME
C507	$87-018-115-080	CAP,CERA-SOL U 47P-50 SL
C508	$87-010-401-080	CAP,ELECT 1-50 SME
C509	$87-010-401-080	CAP,ELECT 1-50 SME
C510	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C511	$87-018-213-080	CAP,CERA-SOL U 0.047-50 F
C512	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C513	$87-018-119-080	CAP,CERA-SOL U 100P-50 B
C514	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C518	$87-018-213-080	CAP,CERA-SOL U 0.047-50 F
C519	$87-010-401-080	CAP,ELECT 1-50 SME
C520	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C521	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C522	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C523	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C524	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C525	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C526	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C527	$87-010-263-080	CAP,ELECT 100-10
C532	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C534	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C535	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C536	$87-018-122-080	CAP,CERA-SOL U 180P-50 B
C551	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y

REF.NO.	PART NO.	DESCRIPTION
C552	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C553	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C554	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C555	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C556	$87-018-213-080	CAP,CERA-SOL U 0.047-50 F
C557	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C558	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C559	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C560	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C561	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C562	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C563	$87-018-213-080	CAP,CERA-SOL U 0.047-50 F
C564	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C565	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C566	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C567	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C568	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C570	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C581	$87-010-263-080	CAP,ELECT 100-10
C583	$87-010-263-080	CAP,ELECT 100-10
C585	$87-010-263-080	CAP,ELECT 100-10
C591	$87-015-681-080	CAP,ELECT 10-16 7L
C592	$87-015-681-080	CAP,ELECT 10-16 7L
C593	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C594	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C601	$87-010-405-080	CAP,ELECT 10-50 SME
C602	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C603	$87-010-403-080	CAP,ELECT 3.3-50 SME
C604	$87-010-403-080	CAP,ELECT 3.3-50 SME
C605	$87-010-263-080	CAP,ELECT 100-10
C606	$87-010-404-080	CAP,ELECT 4.7-50 SME
C607	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C608	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C781	$87-010-401-080	CAP,ELECT 1-50 SME
C782	$87-010-405-080	CAP,ELECT 10-50 SME
C785	$87-010-384-080	CAP,ELECT 100-25 SME
C786	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C789	$87-010-405-080	CAP,ELECT 10-50 SME
C790	$87-010-405-080	CAP,ELECT 10-50 SME
C792	$87-018-203-080	CAP,CERA-SOL U 8200P-16 Y
C793	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C802	$87-010-260-080	CAP,ELECT 47-25 SME
C804	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C805	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C806	$87-010-263-080	CAP,ELECT 100-10
C807	$87-010-263-080	CAP,ELECT 100-10
C808	$87-010-374-080	CAP,ELECT 47-10
C809	$87-010-408-080	CAP,ELECT 47-50 SME
C810	$87-010-404-080	CAP,ELECT 4.7-50 SME
C811	$87-010-404-080	CAP,ELECT 4.7-50 SME
C812	$87-010-401-080	CAP,ELECT 1-50 SME(KE)
C812	$87-010-405-080	CAP,ELECT 10-50 SME(SH)
C813	$87-010-404-080	CAP,ELECT 4.7-50 SME
C814	$87-010-401-080	CAP,ELECT 1-50 SME
C817	$87-010-401-080	CAP,ELECT 1-50 SME
C822	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C823	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C824	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C825	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C826	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C828	$87-010-374-080	CAP,ELECT 47-10
C829	$87-010-405-080	CAP,ELECT 10-50 SME
C832	$87-018-131-080	CAP,CERA-SOL U 1000P-50 B
C833	$87-018-125-080	CAP,CERA-SOL U 330P-50 B

REF.NO.	PART NO.	DESCRIPTION
C834	$87-010-400-080	CAP,ELECT 0.47-50 SME
C835	$87-010-401-080	CAP,ELECT 1-50 SME
C836	$87-018-122-080	CAP,CERA-SOL U 180P-50 B
C837	$87-010-400-080	CAP,ELECT 0.47-50 SME
C839	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C840	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C841	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C843	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C844	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C845	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C848	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C849	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C852	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C853	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C854	$87-010-374-080	CAP,ELECT 47-10
CF801	$87-030-228-010	RESONATOR,CERAMIC CSB500E5
DL501	$80-JUB-675-010	DELAY,ADL-FN1344W
DL502	$80-JUB-676-010	DELAY,ADL-FE2544W
DL503	$80-JUB-674-010	DELAY,ADL-FN1334W
FL401	$89-JU8-618-010	FILTER,MXV-7XF 3M
FL501	$87-008-443-080	FILTER,SFS4.21ME
FL502	$87-008-416-080	FILTER,SFS 5.06ME
FL503	$80-JU1-743-010	FILTER,LPF 1.1M SG
FL504	$80-JUB-681-010	FILTER,BPF 3.58M SG
FL505	$80-JUB-682-010	FILTER,BPF 4.43M SG
J401-1	$89-JU7-646-010	JACK,PIN(VIDEO IN)
J401-2	$ +++	JACK,PIN(AUDIO IN)
J402-1	$89-JU7-646-010	JACK,PIN(VIDEO OUT)
J402-2	$ +++	JACK,PIN(VIDEO OUT)
L401	$87-005-200-080	COIL,22UH
L402	$87-003-102-080	COIL,10UH
L403	$87-003-285-080	COIL,39UH LAL02
L431	$87-003-288-080	COIL,180UH LAL02
L432	$87-003-151-080	COIL,82UH LAL02
L441	$87-003-147-080	COIL,22UH
L442	$87-005-200-080	COIL,22UH
L443	$87-003-150-080	COIL 68UH LAL02
L444	$87-003-150-080	COIL 68UH LAL02
L445	$87-003-150-080	COIL 68UH LAL02
L446	$87-003-150-080	COIL 68UH LAL02
L465	$87-006-189-080	COIL,220UH EL0909
L475	$87-003-151-080	COIL,82UH LAL02
L476	$87-003-282-080	COIL,12UH
L477	$87-003-150-080	COIL 68UH LAL02
L478	$87-003-403-080	COIL,5.6UH LAL02
L479	$87-003-288-080	COIL,180UH LAL02
L480	$87-003-282-080	COIL,12UH
L486	$87-005-208-080	COIL,100UH
L487	$87-005-200-080	COIL,22UH
L488	$87-003-147-080	COIL,22UH
L489	$87-005-208-080	COIL,100UH
L501	$87-005-200-080	COIL,22UH
L503	$87-003-283-080	COIL,18UH LAL02
L531	$87-003-152-080	COIL,100UH
L551	$87-003-146-080	COIL,15UH LAL02
L552	$87-003-146-080	COIL,15UH LAL02
L555	$87-003-146-080	COIL,15UH LAL02
L601	$87-003-147-080	COIL,22UH
L781	$87-005-208-080	COIL,100UH
L801	$87-005-208-080	COIL,100UH
L802	$87-005-208-080	COIL,100UH
L803	$87-005-208-080	COIL,100UH
L805	$87-005-208-080	COIL,100UH
L808	$87-005-208-080	COIL,100UH

REF.NO.	PART NO.	DESCRIPTION
RF386	80-JU4-631-010	RF MOD,D720A(SH)
RF386	89-JU5-676-010	RF MOD,E283A(KE)
SFR401	$87-024-170-080	SFR,3.3K
SFR402	$87-024-171-080	SFR,4.7K
SFR403	$87-024-172-080	SFR,10K
SFR404	$87-024-170-080	SFR,3.3K
SFR405	$87-024-168-080	SFR,1K
SFR406	$87-024-169-080	SFR,2.2K
SFR407	$87-024-169-080	SFR,2.2K
SFR531	$87-024-168-080	SFR,1K
TU801	89-JU5-652-010	TV TUNER,6CZV2(SH)
TU801	80-JU2-611-010	TV TUNER,33-RC01(KE)
VIF801	$80-JU4-644-010	VIF PAC,02M-03(KE)
VIF801	$80-JU1-681-010	VIF PAC,RFIVC,01(SH)
X501	$80-JUB-678-080	RESONATOR,CRYSTAL 3.58M
X502	$89-JU7-641-080	RESONATOR,CRYSTAL 4.43M
=== SERVO/SYS.CON CIRCUIT BOARD SECTION ===		
BZ201	$87-030-210-010	BUZZER,PIEZO PKM17EPT
C101	$87-010-387-080	CAP,ELECT 470-25 SME
C102	$87-018-132-080	CAP,CERA-SOL U 2200P-16 X
C104	$87-010-221-080	CAP,ELECT 470-10
C105	$87-010-408-080	CAP,ELECT 47-50 SME
C106	$87-010-879-080	CAP,ELECT 470-35 SMG
C107	$87-010-384-080	CAP,ELECT 100-25 SME
C108	$87-010-263-080	CAP,ELECT 100-10
C109	$87-010-263-080	CAP,ELECT 100-10
C110	$87-010-384-080	CAP,ELECT 100-25 SME
C111	$87-010-221-080	CAP,ELECT 470-10
C112	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C201	$87-010-263-080	CAP,ELECT 100-10
C202	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C203	$87-018-213-080	CAP,CERA-SOL U 0.047-50 F
C204	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C205	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C221	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C223	$87-010-384-080	CAP,ELECT 100-25 SME
C301	$87-010-263-080	CAP,ELECT 100-10
C302	$87-010-401-080	CAP,ELECT 1-50 SME
C303	$87-010-401-080	CAP,ELECT 1-50 SME
C304	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C305	$87-010-401-080	CAP,ELECT 1-50 SME
C306	$87-010-401-080	CAP,ELECT 1-50 SME
C307	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C308	$87-010-401-080	CAP,ELECT 1-50 SME
C309	$87-010-401-080	CAP,ELECT 1-50 SME
C310	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C321	$87-010-263-080	CAP,ELECT 100-10
C322	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C324	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C326	$87-018-109-080	CAP,CERA-SOL U 22P-50 SL
C327	$87-018-107-080	CAP,CERA-SOL U 18P-50 SL
C328	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C329	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C330	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C331	$87-010-263-080	CAP,ELECT 100-10
C341	$87-010-405-080	CAP,ELECT 10-50 SME
C342	$87-010-405-080	CAP,ELECT 10-50 SME
C343	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C344	$87-010-404-080	CAP,ELECT 4.7-50 SME
C361	$87-010-405-080	CAP,ELECT 10-50 SME
C362	$87-010-402-080	CAP,ELECT 2.2-50 SME
C363	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C364	$87-010-709-080	CAP,ELECT BP 0.22-50

REF.NO.	PART NO.	DESCRIPTION
C365	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C366	$87-010-384-080	CAP,ELECT 100-25 SME
C367	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C368	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C369	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C370	$87-010-400-080	CAP,ELECT 0.47-50 SME
C371	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C372	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C373	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C381	$87-018-131-080	CAP,CERA-SOL U 1000P-50 B
C382	$87-010-382-080	CAP,ELECT 22-25 SME
C383	$87-010-405-080	CAP,ELECT 10-50 SME
C384	$87-018-123-080	CAP,CERA-SOL U 220P-50 B
C385	$87-010-404-080	CAP,ELECT 4.7-50 SME
C386	$87-018-119-080	CAP,CERA-SOL U 100P-50 B
CL201	$87-030-185-080	RESONATOR,CERAMIC KBR6.0MES
L101	$87-005-208-080	COIL,100UH
L201	$87-005-204-080	COIL,47UH
L301	$87-005-204-080	COIL,47UH
L302	$87-003-149-080	COIL,47UH
R106	87-029-070-090	RES,FUSE 2.2-1/4W
RA201	$84-487-615-010	RES,ARRAY 10KX12 LE
RA202	$84-487-615-010	RES,ARRAY 10KX12 LE
RA203	$80-JUB-657-010	RES,ARRAY 10KX10 LE
RA204	$80-JUB-656-010	RES,ARRAY 10KX5 LE
SFR301	$87-024-277-080	SFR,220K
SFR302	$87-024-276-080	SFR,100K
T101	$80-JU4-657-010	POWER TRANSFORMER CONVERTER
X301	$80-JUB-655-080	RESONATOR,CRYSTAL 13.3M
X302	$80-JUB-654-080	RESONATOR,CRYSTAL 10.7M

=== HEAD AMP/AUDIO CIRCUIT BOARD SECTION ===

C653	$87-010-060-080	CAP,ELECT 100-16
C654	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C655	$87-018-117-080	CAP,CERA-SOL U 68P-50 SL
C656	$87-018-113-080	CAP,CERA-SOL U 33P-50 SL
C657	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C658	$87-018-213-080	CAP,CERA-SOL U 0.047-50 F
C659	$87-018-104-080	CAP,CERA-SOL U 10P-50 SL
C660	$87-015-695-080	CAP,ELECT 1-50 7L
C661	$87-018-213-080	CAP,CERA-SOL U 0.047-50 F
C662	$87-018-199-080	CAP,CERA-SOL U 3300P-16 X
C671	$87-015-676-080	CAP,ELECT 47-6.3 7L
C672	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C673	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C674	$87-015-677-080	CAP,ELECT 100-6.3 7L
C675	$87-018-205-080	CAP,CERA-SOL U 0.022-25 F
C677	$87-018-114-080	CAP,CERA-SOL U 39P-50 SL
C678	$87-018-117-080	CAP,CERA-SOL U 68P-50 SL
C680	$87-018-109-080	CAP,CERA-SOL U 22P-50 SL
C681	$87-018-100-080	CAP,CERA-SOL U 4.7P-50 SL
C682	$87-015-695-080	CAP,ELECT 1-50 7L
C683	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C684	$87-018-114-080	CAP,CERA-SOL U 39P-50 SL
C685	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C686	$87-018-114-080	CAP,CERA-SOL U 39P-50 SL
C687	$87-015-695-080	CAP,ELECT 1-50 7L
C689	$87-015-676-080	CAP,ELECT 47-6.3 7L
C701	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C702	$87-010-384-080	CAP,ELECT 100-25 SME
C703	$87-010-405-080	CAP,ELECT 10-50 SME
C704	$87-010-260-080	CAP,ELECT 47-25 SME
C711	$87-010-404-080	CAP,ELECT 4.7-50 SME
C714	$87-010-404-080	CAP,ELECT 4.7-50 SME

REF.NO.	PART NO.	DESCRIPTION
C721	$87-018-127-080	CAP,CERA-SOL U 470P-50
C722	$87-010-382-080	CAP,ELECT 22-25 SME
C731	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C732	$87-018-130-080	CAP,CERA-SOL U 820P-50 B
C733	$87-018-195-080	CAP,CERA-SOL U 1200P-50 X
C734	$87-010-401-080	CAP,ELECT 1-50 SME
C735	$87-010-265-080	CAP,ELECT 33-16 SME
C737	$87-010-401-080	CAP,ELECT 1-50 SME
C741	$87-018-123-080	CAP,CERA-SOL U 220P-50 B
C743	$87-018-131-080	CAP,CERA-SOL U 1000P-50 B
C744	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C745	$87-010-260-080	CAP,ELECT 47-25 SME
C746	$87-010-401-080	CAP,ELECT 1-50 SME
L652	$87-005-208-080	COIL,100UH
L653	$87-003-403-080	COIL,5.6UH LAL02
L671	$87-005-208-080	COIL,100UH
L672	$87-003-284-080	COIL,27UH LAL02
L673	$87-003-284-080	COIL,27UH LAL02
L701	$87-005-239-080	COIL,100UH
L710	$87-005-398-080	COIL,8.2MMH LHL06
T741	$80-JUB-671-010	COIL,OSC BIAS-70K

=== DIGITAL CIRCUIT BOARD SECTION ===

C1	$87-015-677-080	CAP,ELECT 100-6.3 7L
C2	$87-015-677-080	CAP,ELECT 100-6.3 7L
C3	$87-010-197-080	CAP,CHIP S 0.01-25 B
C4	$87-015-676-080	CAP,ELECT 47-6.3 7L
C5	$87-010-452-080	CAP,CHIP 1-16 F
C6	$87-015-681-080	CAP,ELECT 10-16 7L
C7	$87-010-176-080	CAP,CHIP S 680P-50 SL
C10	$87-015-677-080	CAP,ELECT 100-6.3 7L
C11	$87-010-197-080	CAP,CHIP S 0.01-25 B
C12	$87-010-197-080	CAP,CHIP S 0.01-25 B
C13	$87-010-197-080	CAP,CHIP S 0.01-25 B
C14	$87-012-349-080	CAP,CHIP S 1000P-50 CH
C15	$87-010-197-080	CAP,CHIP S 0.01-25 B
C17	$87-010-197-080	CAP,CHIP S 0.01-25 B
C18	$87-010-452-080	CAP,CHIP 1-16 F
C19	$87-015-676-080	CAP,ELECT 47-6.3 7L
C20	$87-010-197-080	CAP,CHIP S 0.01-25 B
C21	$87-010-452-080	CAP,CHIP 1-16 F
C22	$87-010-197-080	CAP,CHIP S 0.01-25 B
C23	$87-010-197-080	CAP,CHIP S 0.01-25 B
C24	$87-010-178-080	CAP,CHIP S 1000P-50 B
C25	$87-010-178-080	CAP,CHIP S 1000P-50 B
C26	$87-010-197-080	CAP,CHIP S 0.01-25 B
C27	$87-010-175-080	CAP,CHIP S 560P-50 SL
C30	$87-010-175-080	CAP,CHIP S 560P-50 SL
C31	$87-010-197-080	CAP,CHIP S 0.01-25 B
C32	$87-010-194-080	CAP,CHIP S 0.047-25 F
C33	$87-010-194-080	CAP,CHIP S 0.047-25 F
C34	$87-010-450-080	CAP,CHIP 0.47-16 F
C35	$87-010-452-080	CAP,CHIP 1-16 F
C36	$87-010-452-080	CAP,CHIP 1-16 F
C37	$87-010-152-080	CAP,CHIP S 8P-50 CH
C38	$87-012-155-080	CAP,CHIP S 180P-50 CH
C39	$87-015-681-080	CAP,ELECT 10-16 7L
C40	$87-010-152-080	CAP,CHIP S 8P-50 CH
C41	$87-012-155-080	CAP,CHIP S 180P-50 CH
C42	$87-015-681-080	CAP,ELECT 10-16 7L
C45	$87-010-452-080	CAP,CHIP 1-16 F
C46	$87-010-452-080	CAP,CHIP 1-16 F
C47	$87-010-452-080	CAP,CHIP 1-16 F

REF.NO.	PART NO.	DESCRIPTION
C49	$87-010-452-080	CAP,CHIP 1-16 F
C50	$87-010-197-080	CAP,CHIP S 0.01-25 B
C51	$87-015-676-080	CAP,ELECT 47-6.3 7L
C53	$87-012-155-080	CAP,CHIP S 180P-50 CH
C54	$87-010-315-080	CAP,CHIP S 27P-50 CH
C55	$87-015-677-080	CAP,ELECT 100-6.3 7L
C56	$87-015-677-080	CAP,ELECT 100-6.3 7L
C57	$87-010-197-080	CAP,CHIP S 0.01-25 B
C58	$87-010-197-080	CAP,CHIP S 0.01-25 B
C60	$87-010-197-080	CAP,CHIP S 0.01-25 B
C61	$87-015-676-080	CAP,ELECT 47-6.3 7L
C62	$87-010-197-080	CAP,CHIP S 0.01-25 B
C63	$87-010-196-080	CAP,CHIP S 0.1-25 F
C64	$87-010-312-080	CAP,CHIP S 15P-50 C
C65	$87-010-178-080	CAP,CHIP S 1000P-50 B
C67	$87-010-197-080	CAP,CHIP S 0.01-25 B
C68	$87-015-681-080	CAP,ELECT 10-16 7L
C69	$87-015-681-080	CAP,ELECT 10-16 7L
C70	$87-015-676-080	CAP,ELECT 47-6.3 7L
C71	$87-010-197-080	CAP,CHIP S 0.01-25 B
C72	$87-015-676-080	CAP,ELECT 47-6.3 7L
C73	$87-010-197-080	CAP,CHIP S 0.01-25 B
C74	$87-015-681-080	CAP,ELECT 10-16 7L
C76	$87-010-315-080	CAP,CHIP S 27P-50 C
C77	$87-010-315-080	CAP,CHIP S 27P-50 C
C79	$87-010-315-080	CAP,CHIP S 27P-50 C
C80	$87-012-159-080	CAP,CHIP S 24P-50 CH
C83	$87-012-157-080	CAP,CHIP S 330P-50 CH
C85	$87-015-677-080	CAP,ELECT 100-6.3 7L
C86	$87-010-197-080	CAP,CHIP S 0.01-25 B
C87	$87-010-197-080	CAP,CHIP S 0.01-25 B
C88	$87-010-197-080	CAP,CHIP S 0.01-25 B
C89	$87-010-197-080	CAP,CHIP S 0.01-25 B
C90	$87-010-197-080	CAP,CHIP S 0.01-25 B
C92	$87-010-197-080	CAP,CHIP S 0.01-25 B
C93	$87-015-681-080	CAP,ELECT 10-16 7L
C94	$87-010-197-080	CAP,CHIP S 0.01-25 B
C95	$87-010-197-080	CAP,CHIP S 0.01-25 B
C96	$87-015-676-080	CAP,ELECT 47-6.3 7L
C97	$87-015-676-080	CAP,ELECT 47-6.3 7L
C98	$87-015-681-080	CAP,ELECT 10-16 7L
C99	$87-015-681-080	CAP,ELECT 10-16 7L
C100	$87-015-677-080	CAP,ELECT 100-6.3 7L
C101	$87-010-197-080	CAP,CHIP S 0.01-25 B
C103	$87-010-197-080	CAP,CHIP S 0.01-25 B
C105	$87-010-955-080	CAP,CHIP 0.33-16 R
C106	$87-010-956-080	CAP,CHIP S 0.068-25 B
C107	$87-010-452-080	CAP,CHIP 1-16 F
C108	$87-010-197-080	CAP,CHIP S 0.01-25 B
C109	$87-010-197-080	CAP,CHIP S 0.01-25 B
C110	$87-012-349-080	CAP,CHIP S 1000P-50 CH
C115	$87-010-197-080	CAP,CHIP S 0.01-25 B
C116	$87-010-175-080	CAP,CHIP S 560P-50 SL
C117	$87-010-956-080	CAP,CHIP S 0.068-25 B
C122	$87-010-452-080	CAP,CHIP 1-16 F
C123	$87-010-452-080	CAP,CHIP 1-16 F
C124	$87-010-196-080	CAP,CHIP S 0.1-25 F
C125	$87-010-197-080	CAP,CHIP S 0.01-25 B
C126	$87-010-196-080	CAP,CHIP S 0.1-25 F
C127	$87-010-318-080	CAP,CHIP S 47P-50 CH
C128	$87-010-452-080	CAP,CHIP 1-16 F
C129	$87-010-197-080	CAP,CHIP S 0.01-25 B
C132	$87-010-452-080	CAP,CHIP 1-16 F
C133	$87-010-452-080	CAP,CHIP 1-16 F

REF.NO.	PART NO.	DESCRIPTION
C134	$87-010-196-080	CAP,CHIP S 0.1-25 F
C135	$87-010-196-080	CAP,CHIP S 0.1-25 F
C136	$87-010-197-080	CAP,CHIP S 0.01-25 B
C137	$87-010-318-080	CAP,CHIP S 47P-50 CH
C138	$87-010-452-080	CAP,CHIP 1-16 F
C139	$87-010-197-080	CAP,CHIP S 0.01-25 B
C140	$87-010-452-080	CAP,CHIP 1-16 F
C141	$87-010-452-080	CAP,CHIP 1-16 F
C142	$87-010-452-080	CAP,CHIP 1-16 F
D1	$87-002-345-080	VARI-CAP,CHIP 1T363
FL1	$80-JU4-681-010	FILTER,MZV-75D 3MLP
FL2	$80-JU4-686-010	FILTER,MXV-703 3.9MBP
FL3	$80-JU4-682-010	FILTER,MYV-251 3MLP
FL10	$87-003-291-080	FILTER,EMI DSS306 102M
FL11	$87-003-291-080	FILTER,EMI DSS306 102M
FL12	$87-003-291-080	FILTER,EMI DSS306 102M
FL13	$87-003-291-080	FILTER,EMI DSS306 102M
FL14	$87-003-291-080	FILTER,EMI DSS306 102M
FL15	$87-003-291-080	FILTER,EMI DSS306 102M
FL16	$87-003-291-080	FILTER,EMI DSS306 102M
FL17	$87-003-291-080	FILTER,EMI DSS306 102M
FL18	$87-003-291-080	FILTER,EMI DSS306 102M
FL19	$87-003-291-080	FILTER,EMI DSS306 102M
FL20	$87-003-291-080	FILTER,EMI DSS306 102M
L1	$87-005-547-080	COIL,47UH J FLR25
L2	$87-005-547-080	COIL,47UH J FLR25
L3	$87-005-265-080	COIL,CHIP 33UH
L4	$87-005-266-080	COIL,CHIP 47UH
L5	$87-005-266-080	COIL,CHIP 47UH
L6	$87-005-547-080	COIL,47UH J FLR25
L7	$87-005-547-080	COIL,47UH J FLR25
L8	$87-005-266-080	COIL,CHIP 47UH
L9	$87-005-259-080	COIL,CHIP 3.3UH
L10	$87-005-547-080	COIL,47UH J FLR25
L11	$87-005-547-080	COIL,47UH J FLR25
L12	$87-005-266-080	COIL,CHIP 47UH
L13	$87-005-547-080	COIL,47UH J FLR25
L15	$87-005-547-080	COIL,47UH J FLR25
L16	$87-005-263-080	COIL,CHIP 15UH
L17	$87-005-263-080	COIL,CHIP 15UH
L18	$87-005-263-080	COIL,CHIP 15UH
SFR1	$87-024-063-080	SFR,CHIP 3.3K
SFR2	$87-024-131-080	SFR,CHIP 47K
SFR3	$87-024-131-080	SFR,CHIP 47K
SFR4	$87-024-131-080	SFR,CHIP 47K
SFR5	$87-024-062-080	SFR,CHIP 1K
SFR6	$87-024-062-080	SFR,CHIP 1K
SFR7	$87-024-130-080	SFR,CHIP 10K
SFR8	$87-024-130-080	SFR,CHIP 10K
SFR9	$87-024-378-080	SFR,CHIP 330K
SFR10	$87-024-378-080	SFR,CHIP 330K
TC1	$87-011-221-080	TRIMMER,30P VC51
TC2	$87-011-221-080	TRIMMER,30P VC51
TC5	$87-011-221-080	TRIMMER,30P VC51
X1	$80-JU1-676-080	RESONATOR,CRYSTAL 14.31MHZ
X2	$80-JU1-661-080	RESONATOR,CRYSTAL 17.73MHZ
X3	$80-JU1-676-080	RESONATOR,CRYSTAL 14.31MHZ
X4	$80-JU1-661-080	RESONATOR,CRYSTAL 17.73MHZ

=== AUTO TRACKING CIRCUIT BOARD SECTION ===

C951	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C952	$87-018-121-080	CAP,CERA-SOL U 150P-50 B
C953	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C956	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y

REF.NO.	PART NO.	DESCRIPTION
C957	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C958	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C959	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C960	$87-010-263-080	CAP,ELECT 100-10
C961	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C962	$87-018-214-080	CAP,CERA-SOL U 0.1-50 F
C963	$87-010-263-080	CAP,ELECT 100-10
C965	$87-018-134-080	CAP,CERA-SOL U 0.01-16 Y
C966	$87-010-263-080	CAP,ELECT 100-10
CL951	$87-030-179-080	RESONATOR,CERAMIC KBR-4.0MES
L951	$87-003-149-080	COIL,47UH
L952	$87-005-514-080	COIL,8.2UH J LAL02
L953	$87-003-149-080	COIL,47UH

=== FRONT CIRCUIT BOARD SECTION ===

C901	$87-010-920-080	CAP,ELECT 22-16 SRE
C902	$87-010-920-080	CAP,ELECT 22-16 SRE
C903	$87-018-213-080	CAP,CERA-SOL U 0.047-50 F
C908	$87-010-922-080	CAP,ELECT 33-25 SRE
C909	$87-018-148-080	CAP,CERA-SOL U 12P-50 CH
C912	$87-018-213-080	CAP,CERA-SOL U 0.047-50 F
D924	87-001-124-080	LED,SLZ-381C-02(PAL)
D925	87-001-124-080	LED,SLZ-381C-02(MESECAM)
D926	87-001-124-080	LED,SLZ-381C-02(NTSC 3.58)
D927	87-001-124-080	LED,SLZ-381C-02(NTSC 4.43)
D928	87-001-824-080	LED,LT3S47B(AUTO TRACKING)
D929	87-001-294-080	LED,SLZ-481C-02(CONVERTER)
D930	87-001-294-080	LED,SLZ-481C-02(CONVERTER)
FL901	89-JU5-621-010	FL,9-LT-20GK(DISPLAY)
J901-1	$87-009-206-010	JACK,PIN(AUDIO IN)
J901-2	$ +++	JACK,PIN(VIDEO IN)
L901	$87-005-239-080	COIL,100UH
RV901	$87-024-329-010	VR,10KB(PICTURE)
SW903	87-036-214-080	SW,TACT(STOP)
SW904	87-036-214-080	SW,TACT(F.FWD)
SW905	87-036-214-080	SW,TACT(REW)
SW906	87-036-214-080	SW,TACT(PLAY)
SW907	87-036-214-080	SW,TACT(PAUSE/STILL)
SW908	87-036-214-080	SW,TACT(RECORD)
SW910	87-036-214-080	SW,TACT(QTR)
SW911	87-036-214-080	SW,TACT(TIMER REC)
SW912	87-036-214-080	SW,TACT(RESET)
SW913	87-036-214-080	SW,TACT(MEMO)
SW914	87-036-214-080	SW,TACT(INPUT)
SW915	87-036-214-080	SW,TACT(CLOCK/COUNTER)
SW916	87-036-214-080	SW,TACT(CHECK/PRGM)
SW917	87-036-214-080	SW,TACT(NEXT)
SW918	87-036-214-080	SW,TACT(CLEAR)
SW919	87-036-214-080	SW,TACT(TIME SET)
SW920	87-036-214-080	SW,TACT(CH UP)
SW921	87-036-214-080	SW,TACT(CH DOWN)
SW931	87-036-207-010	SW,SLIDE(AUTO TRACKING)
SW932	87-036-212-010	SW,SLIDE(CONVERTER OUT)
X901	$87-030-194-010	RESONATOR,CRYSTAL 32.768K5PPM
X902	$87-030-203-080	RESONATOR,CERAMIC KBR4.19MKS

=== KEY SWITCH CIRCUIT BOARD SECTION ===

D922	87-001-123-080	LED,SLZ-981C-02(POWER)
SW901	87-036-214-080	SW,TACT(POWER)
SW902	87-036-214-080	SW,TACT(EJECT)
SW922	87-036-214-080	SW,TACT(1)
SW923	87-036-214-080	SW,TACT(10)
SW924	87-036-214-080	SW,TACT(AUTO/MANUAL)

REF.NO.	PART NO.	DESCRIPTION
SW925	87-036-214-080	SW,TACT(TU +)
SW926	87-036-214-080	SW,TACT(TU -)
SW927	87-036-214-080	SW,TACT(BAND)
SW929	87-036-214-080	SW,TACT(PRESET)
SW930	87-036-214-080	SW,TACT(SYSTEM)

=== POWER-1 CIRCUIT BOARD SECTION ===

,C101	$S0-05C-001-010	CAP,FILM 0.22 250V
C103	S9-EVC-000-210	CAP,CERA 3300P-250
,J1	S0-051-NLE-T00	AC JACK(AC)
,F101	S0-05F-001-010	FUSE,T1.6A 250V
,L101	S0- -010	COIL,CHOKE 33MMH 0.5A

=== POWER-2 CIRCUIT BOARD SECTION ===

C102-1	$S9-EVC-000-210	CAP,CERA 3300P-250
~~C102-2~~	~~$~~	
C102-2	$S9-EVC-000-210	CAP,CARA 3300P-250
C104	$S0- 010	CAP,ELECT 150-400
C106	$S0- -010	CAP,100P-1000
C107	$S0-05C-001-070	CAP,ELECT 1-400
C105	$S0- 010	CAP,FILM 0.047-630
C201	$S0-05E-002-010	CAP,0.047-50
C202	$87-010-029-010	CAP,0.047-50
C203	$S0-9EC-000-070	CAP,ELECT 680-25
~~C204~~	~~$~~	
C204	$S0-9EC-000-070	CAP,ELECT 680-25
C205	$S0-9EC-000-070	CAP,ELECT 680-25
C206	$87- -010	CAP,ELECT 1200-10
C207	$87- -010	CAP,ELECT 470-16
C208	$87-010-263-010	CAP,ELECT 100-10
C209	$87-010-622-010	CAP,ELECT 470-16
C210	$87-015-869-010	CAP,ELECT 100-16
~~C211~~	~~$87-015-869-010~~	~~CAP,ELECT 100-16~~
C211	$87-015-869-010	CAP,ELECT 100-16
L201	$S0-05L-002-010	COIL,CHOKE 39UH 1A
L202	$S0-05L-002-010	COIL,CHOKE 39UH 1A
PC101	S0-05P-C01-010	PHOTO COUPLER ON3171R
R101	83-131-616-010	RES,NF 2.2 3W
R102	S0-05R-001-020	RES,NF 47K 3W
R103	S0- -010	RES,NF 270K 1/2W
R108	S0- -010	RES,NF 0.22 1W
,R109	87- - -010	RES,FUSE 820
R214	S0- -010	RES,NF 820 1W
RV201	~~S0-9ET-000-010~~	SFR,1K
T101	S0-9ET-000-010	TRANSFORMER,TS29K200

=== RELAY-1 CIRCUIT BOARD SECTION ===

=== RELAY-2 CIRCUIT BOARD SECTION ===

=== RELAY-3 CIRCUIT BOARD SECTION ===

PCB-L	$S8-059-013-470	RELAYS PCB ASSY

=== RELAY-4 CIRCUIT BOARD SECTION ===

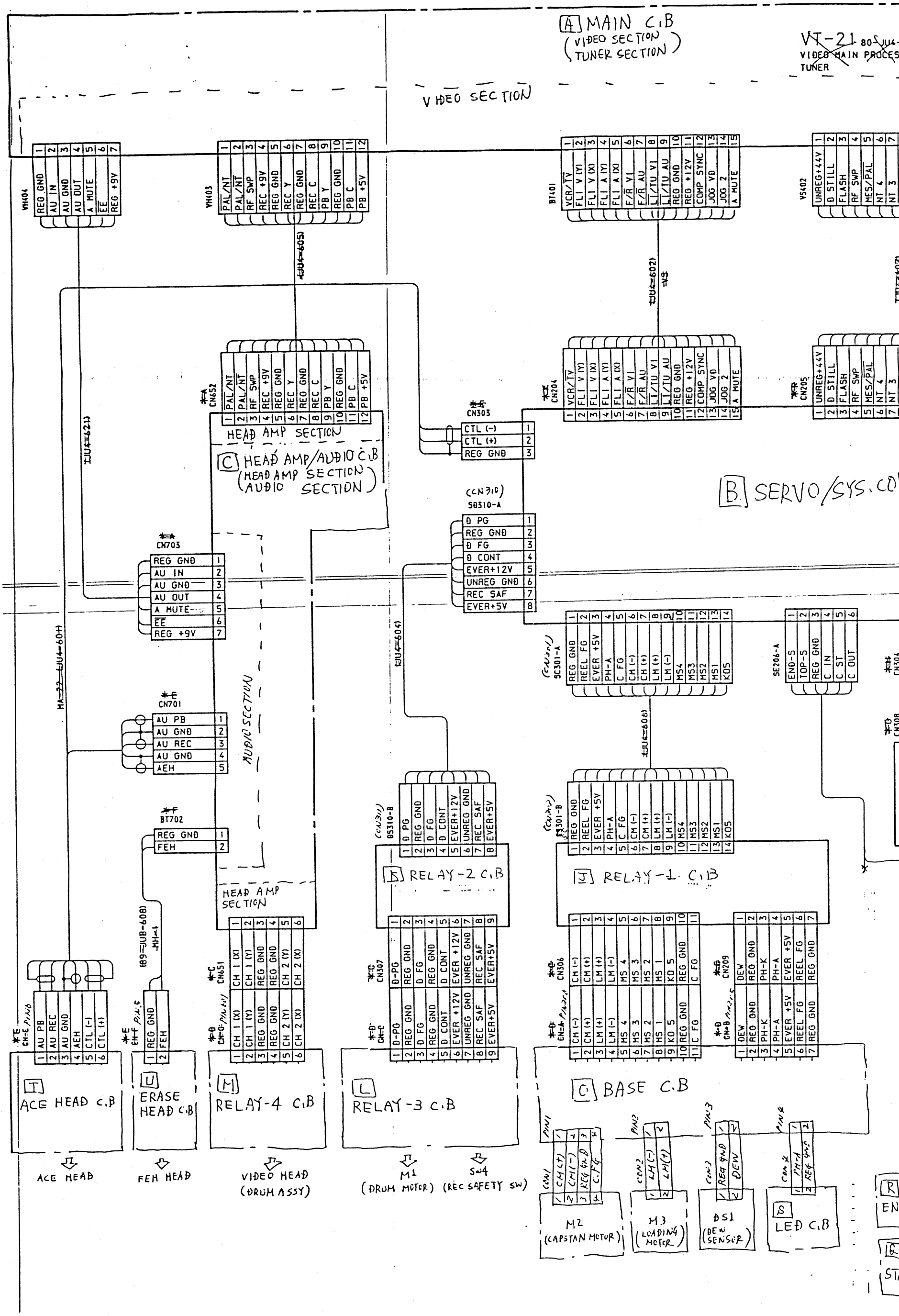
PCB-M	S8-059-013-050	RELAY-4 PCB ASSY

=== RELAY-5 CIRCUIT BOARD SECTION ===

=== BASE CIRCUIT BOARD SECTION ===

REF.NO.	PART NO.	DESCRIPTION
CP1	S6-808-080-030	PHOTO(REEL)SENSOR ON1385
PCB-0	$S8-059-133-020	BASE PCB ASSY
=== SWITCH CIRCUIT BOARD SECTION ===		
PCB-P	$S8-059-163-330	SWITCH PCB ASSY(W/SW1,2,3)
=== START SENSOR CIRCUIT BOARD SECTION ===		
PCB-Q	$S8-059-163-160	SENSOR PCB RM ASSY
=== END SENSOR CIRCUIT BOARD SECTION ===		
PCB-R	$S8-059-163-010	SENSOR PCB LM ASSY
=== LED CIRCUIT BOARD SECTION ===		
LED1	$S8-059-133-030	LED ASSY(W/PCB-S)
=== ACE HEAD CIRCUIT BOARD SECTION ===		
ACEH	S6-204-150-060	ACE HEAD HV22521(W/PCB-T)
=== ERASE HEAD CIRCUIT BOARD SECTION ===		
FHE	S6-204-150-030	FULL ERASE HEAD (W/PCB-U)
=== MISCELLANEOUS ===		
	S8-059-010-190	UPPER DRUM(W/VIDEO HEAD)
	S8-059-013-040	LOWER DRUM ASSY
DS1	$S6-808-080-040	DEW SENSOR EYH-S10R
M1	S6-004-090-010	CYLINDER MOTOR TM82
M2	S8-059-073-020	CAPSTAN MOTOR ASSY
M3	S8-059-113-010	LOADING MOTOR ASSY
SW4	S6-401-011-510	LEAF SW(REC PREVENTION)

WIREHARNESS DIAGRAM



MAIN C.B
(VIDEO SECTION
TUNER SECTION)

VT-21 80-JU4-611
VIDEO MAIN PROCESS
TUNER

TU801

(IEC)

AERIAL RF801

RF OUT

VIDEO IN

AUDIO IN

VIDEO OUT

RCA PIN.J

CORD PIN TU
(JU4-662)

TUNER SECTION

VIDEO SECTION

VS402: UNREG+44V, D STILL, FLASH, RF SWP, MES/PAL, NT 4, NT 3, PLAY, EE, DOC P, REG GND, 3FSC, REG GND, D REC, PB C AT

VF801: SYNC DET, S MUTE, AFT H, AFT L, PPO, BAND 2, BAND 1, AFT D, K MUTE, DIG PAL, DIG NT, REG GND, P CONT

CN405: EVER +5V, REG +5V, REG GND, REG GND, DIG +5V, DIG GND

BT591: REG+9V, 3FSC, REG GND

CN406: DIG Y, REG GND, TH V, REG GND

CN402 CN001: DIG Y, REG GND, TH V, REG GND

(JU4-622) 9V

*Q CN002 CN2: REG +9V, 3FSC, REG GND

(JU4-621)

(JU4-607)

CN205: UNREG+44V, D STILL, FLASH, RF SWP, MES/PAL, NT 4, NT 3, PLAY, EE, DOC P, REG GND, 3FSC, REG GND, D REC, PB C AT

CN203: UNREG+18V, UNREG GND, UNREG GND, EVER +12V, REG +5V, REG GND, EVER +5V, P-ON

SF201: EVER +5V, UNREG GND, UNREG GND, UNREG-24V, UNREG-20V, REEL FG, REQ, READY, SO, BUZZER, SCK, SI, SYNC, RST

B SERVO/SYS. CON C.B
SS-21 80-JU4-620
SYSTEM CONTROL
SERVO
CONV

CN901: EVER +5V, UNREG GND, UNREG GND, UNREG-24V, UNREG-20V, REEL FG, REQ, READY, SO, BUZZER, SCK, SI, SYNC, RST

(JU4-624)

(JU4-608)

(JU4-606)

(JU4-609)

T LINE

(JU4-609L)

SE206-A: END-S, TOP-S, REG GND, C IN, C ST, C OUT

CN304: C CONT, CTLP, D PB, JOG, PAUSE, TR RST, PAL/NT, DOC P, REG GND, PB C AT

CN308: C CONT, CTLP, D PB, JOG, PAUSE, TR RST, PAL/NT, DOC P, REG GND, PB C AT

CN305: ACK, RF SWP, KO 4, KI 2, KI 1, KI 0, TRKG LED, TRKG A/H, EVER +5V, REG GND

CN309: ACK, RF SWP, KO 4, KI 2, KI 1, KI 0, TRKG LED, TRKG A/H, EVER +5V, REG GND

CN202: F/R AU, FLT A (X), FLT A (Y), F/R VI, FLT V (X), FLT V (Y), TRKG LED, TRKG A/H, REG +5V, REG GND

AT-21 80-JU4-612
AUTO TRACKING
E AUTO TRACKING C.B

FS903: F/R AU, FLT A (X), FLT A (Y), F/R VI, FLT V (X), FLT V (Y), TRKG LED, TRKG A/H, REG +5V, REG GND

4 RELAY-1 C.B: REEL FG, EVER +5V, PH-A, C FG, CM (-), CM (+), LM (+), LM (-), MS4, MS3, MS2, MS1, KOS

CN209: DEW, REG GND, PH-K, PH-A, EVER +5V, REEL FG, REG GND

C BASE C.B

M3 (LOADING MOTOR)

DS1 (DEW SENSOR)

LED C.B

R END SENSOR C.B

Q START SENSOR C.B

P SWITCH C.B

N RELAY-5 C.B

FR-21 80-JU4-615
TIMER-TUNER CONTROL
KEY SENS

F FR

FR-22 80-JU4-616
KEY

G KEY SWITCH C.B

CN904: KM 1, KM 0, KM 3, KM 2, A, H, F, G, REG +5V, REG GND

CN905: KM 1, KM 0, KM 3, KM 2, A, H, F, G, REG +5V, REG GND

(IEC)

TU801

CORD PIN TU
(JU4-662)

AERIAL
RF801

RF
OUT

VIDEO
IN

AUDIO
IN

VIDEO
OUT

AUDIO
OUT

RCA PIN.J

TUNER SECTION

VIDEO SECTION

VF801

1	SYNC DET
2	S MUTE
3	AFT H
4	AFT L
5	PPO
6	BAND 2
7	BAND 1
8	AFT D
9	K MUTE
10	DIG PAL
11	DIG NT
12	REG GND
13	P CONT

CN405

1	EVER +5V
2	REG +5V
3	REG GND
4	REG GND
5	DIG +5V
6	DIG GND

BT591

1	REG+9V
2	3FSC
3	REG GND

CN406

1	DIG Y
2	REG GND
3	TH V
4	REG GND
5	DIG C
6	REG GND
7	REG +5V
8	REG GND
9	DIG +5V
10	DIG GND
11	DIG NT
12	DIG PAL
13	REG GND
14	JOG 2
15	BYPASS
16	NT 3
17	NT 4
18	MES/PAL
19	RF SWP
20	FLASH
21	D STILL
22	REG GND
23	DIG V
24	REG GND
25	NC

CN401

1	DIG Y
2	REG GND
3	TH V
4	REG GND
5	DIG C
6	REG GND
7	REG +5V
8	REG GND
9	DIG +5V
10	DIG GND
11	DIG NT
12	DIG PAL
13	REG GND
14	JOG 2
15	BYPASS
16	NT 3
17	NT 4
18	MES/PAL
19	RF SWP
20	FLASH
21	D STILL
22	REG GND
23	DIG V
24	REG GND
25	NC

(JU4-622)

5V

*Q
EN002CN2

1	REG +9V
2	3FSC
3	REG GND

DC-1
~~DIGITAL PROCESS~~ DIGITAL C.B
~~80-JU4-691~~

CN203

1	UNREG+18V
2	UNREG GND
3	UNREG GND
4	EVER +12V
5	REG +5V
6	REG GND
7	REG GND
8	EVER +5V
9	P-ON

SF201

1	EVER +5V
2	UNREG GND
3	UNREG GND
4	UNREG-24V
5	UNREG-20V
6	REEL FG
7	REQ
8	READY
9	SO
10	BUZZER
11	SCK
12	SI
13	SYNC
14	RST

BT102

	EVER +5V
	REG +5V
	REG GND
	REG GND
	DIG +5V
	DIG GND

I POWER-2 C.B
~~UNIT. POWER 4E~~
~~80-JU4-658~~

BT101

1	UNREG+18V
2	UNREG GND
3	UNREG GND
4	EVER +12V
5	REG +5V
6	REG GND
7	REG GND
8	EVER +5V
9	P-ON

H POWER-1 C.B

AC CORD
SET ASSY

AC IN
AC IN

AC~

CTLP
D PB
JOG
PAUSE
TR RST
PAL/NT
DOC P
REG GND
PB C AT

CN309

CN305

1	ACK
2	RF SWP
3	KO 4
4	KI 2
5	KI 1
6	KI 0
7	TRKG LED
8	TRKG A/M
9	EVER +5V
10	REG GND

CN202

1	F/R AU
2	FLT A (X)
3	FLT A (Y)
4	F/R VI
5	FLT V (X)
6	FLT V (Y)
7	TRKG LED
8	TRKG A/M
9	REG +5V
10	REG GND

T LINE

(JU4-609)

(JU4-624)

(JU4-608)

~~AT-21~~ ~~80-JU4-612~~
~~AUTO TRACKING~~
E AUTO TRACKING C.B

FS303

1	F/R AU
2	FLT A (X)
3	FLT A (Y)
4	F/R VI
5	FLT V (X)
6	FLT V (Y)
7	TRKG LED
8	TRKG A/M
9	REG +5V
10	REG GND

CN901

1	EVER +5V
2	UNREG GND
3	UNREG GND
4	UNREG-24V
5	UNREG-20V
6	REEL FG
7	REQ
8	READY
9	SO
10	BUZZER
11	SCK
12	SI
13	SYNC
14	RST

CN902

1	SYNC DET
2	S MUTE
3	AFT H
4	AFT L
5	PPO
6	BAND 2
7	BAND 1
8	AFT D
9	K MUTE
10	DIG PAL
11	DIG NT
12	REG GND
13	P CONT

FR-21 80-JU4-615
TIMER-TUNER CONTROL
KEY SENS
F FRONT C.B

SE206-B

1	END-S
2	TOP-S
3	REG GND
4	C IN
5	C ST
6	C OUT

N
RELAY-5 C.B

CN208

CN310

1	END-S
2	TOP-S
3	REG GND
4	C IN
5	C ST
6	C OUT

CN904

CN905

1	KM 1
2	KM 0
3	KM 3
4	KM 2
5	A
6	H
7	F
8	G
9	REG +5V
10	REG GND

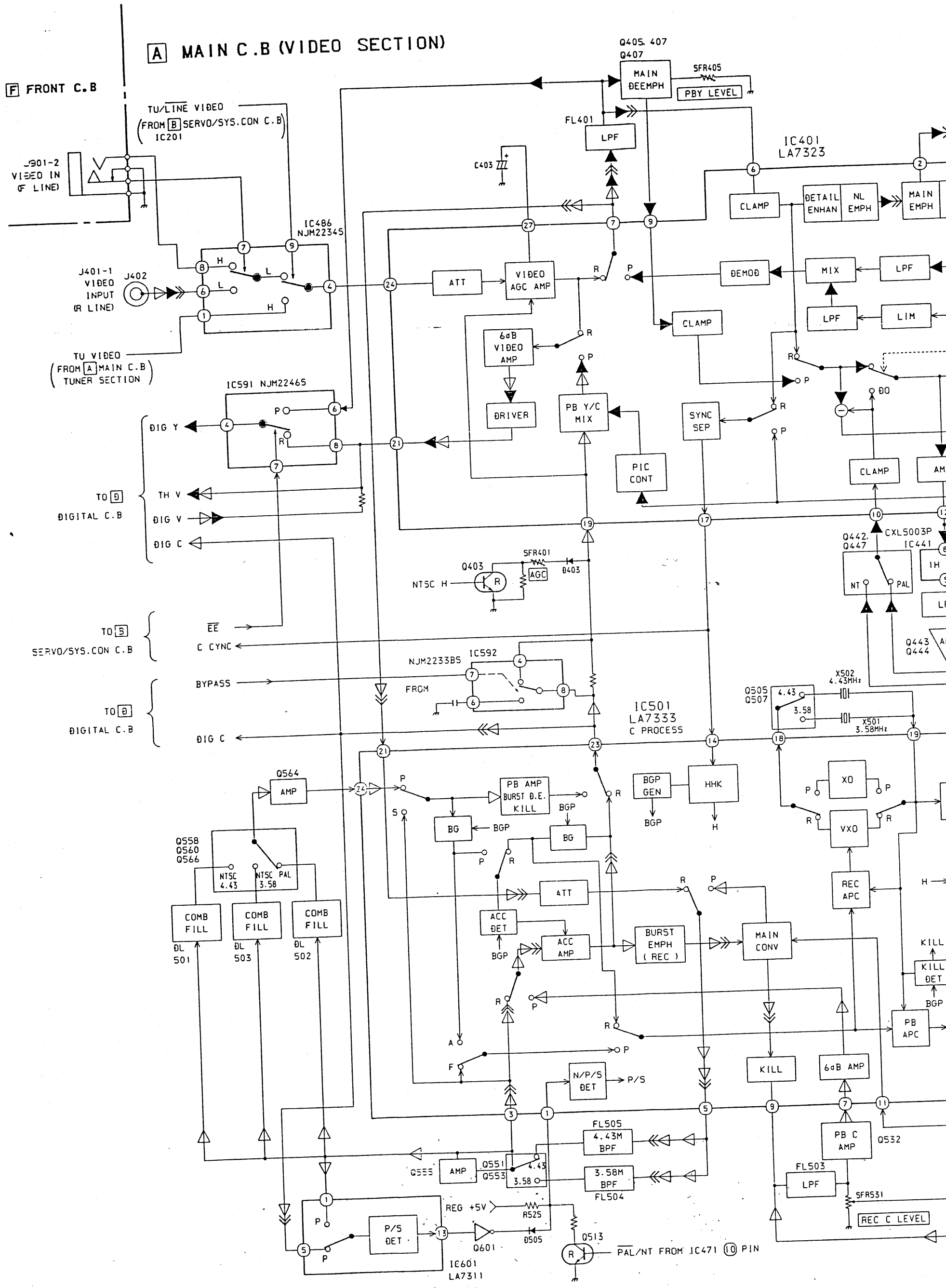
~~FR-22~~ ~~80-JU4-616~~
~~KEY~~
G KEY SWITCH C.B

SENSOR C.B

P SWITCH C.B

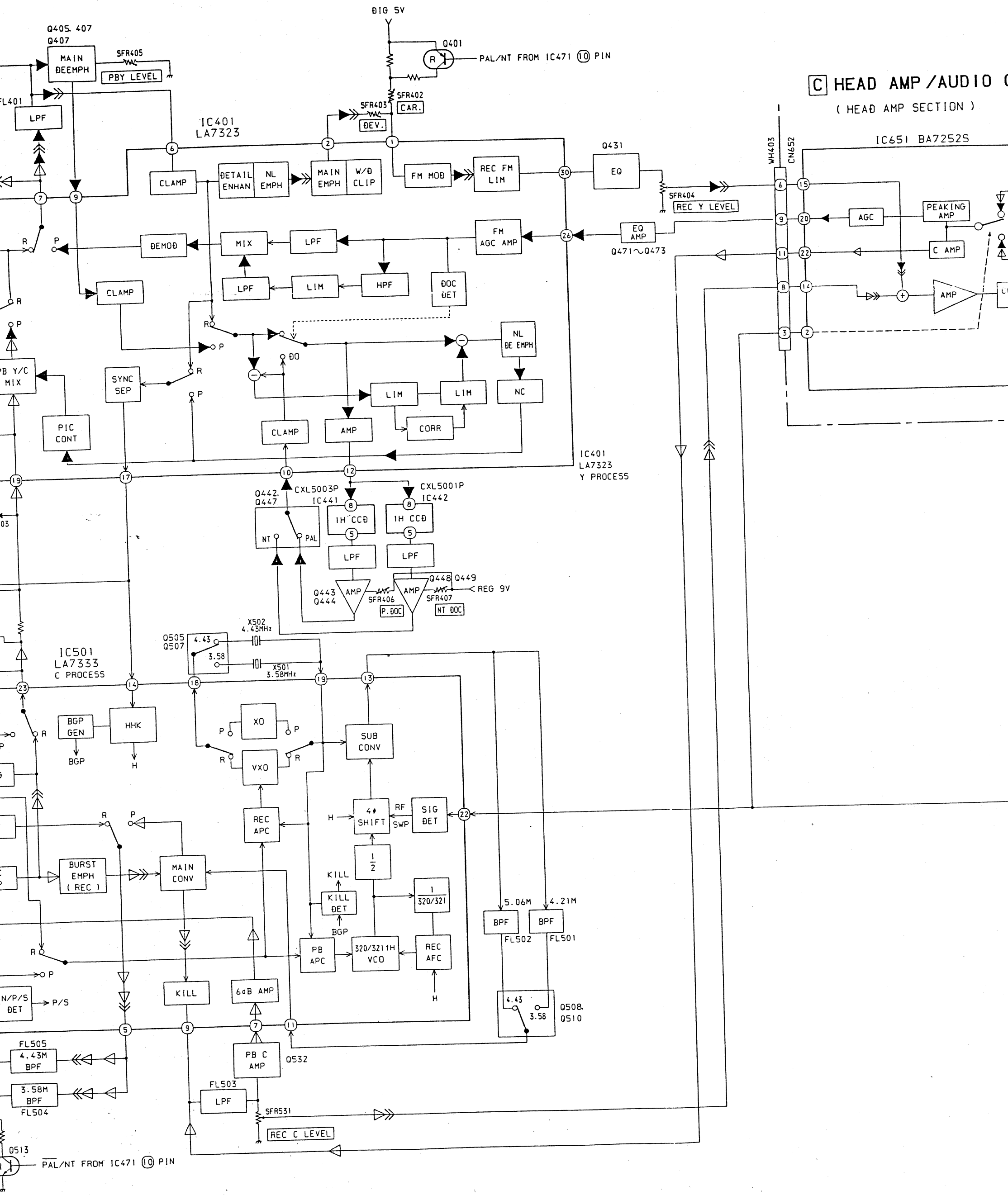
SENSOR C.B

BLOCK DIAGRAM-1



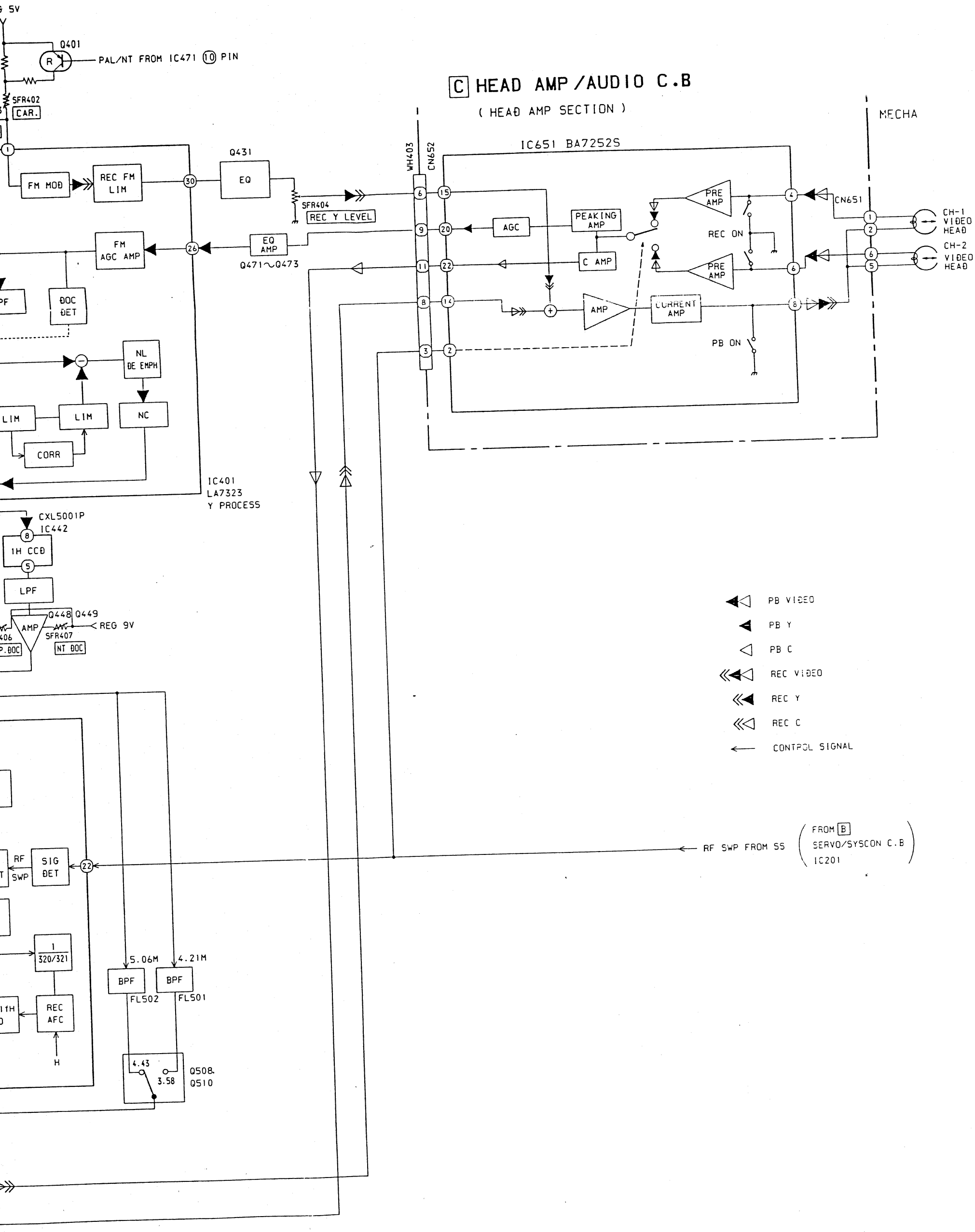
C HEAD AMP/AUDIO C

(HEAD AMP SECTION)



C HEAD AMP /AUDIO C.B

(HEAD AMP SECTION)

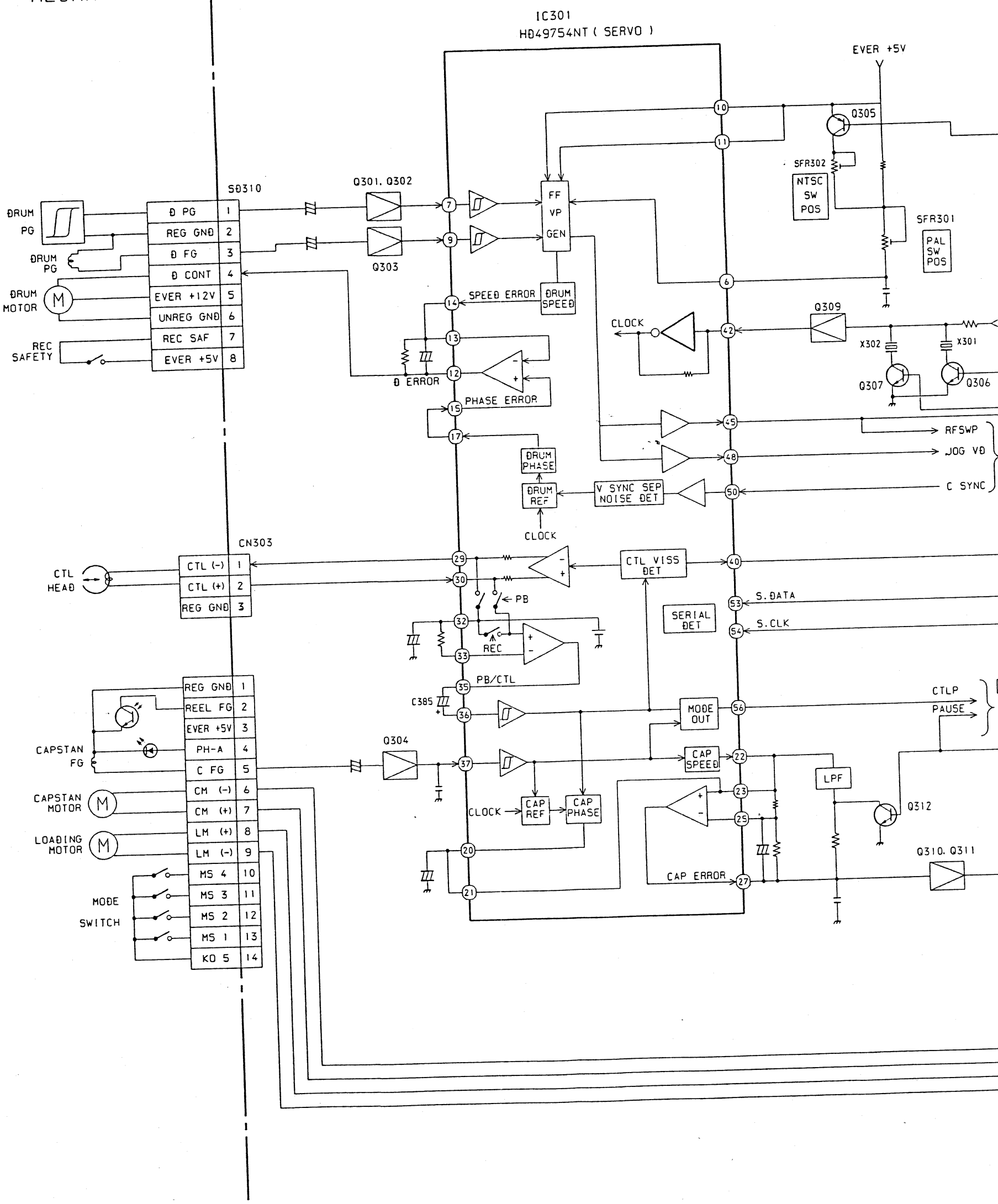


BLOCK DIAGRAM-2

SERVO BLOCK DIAGRAM (HV-MG300)

[A] MAIN C.B (SERVO/SYSTEM CONTROL SECTION)

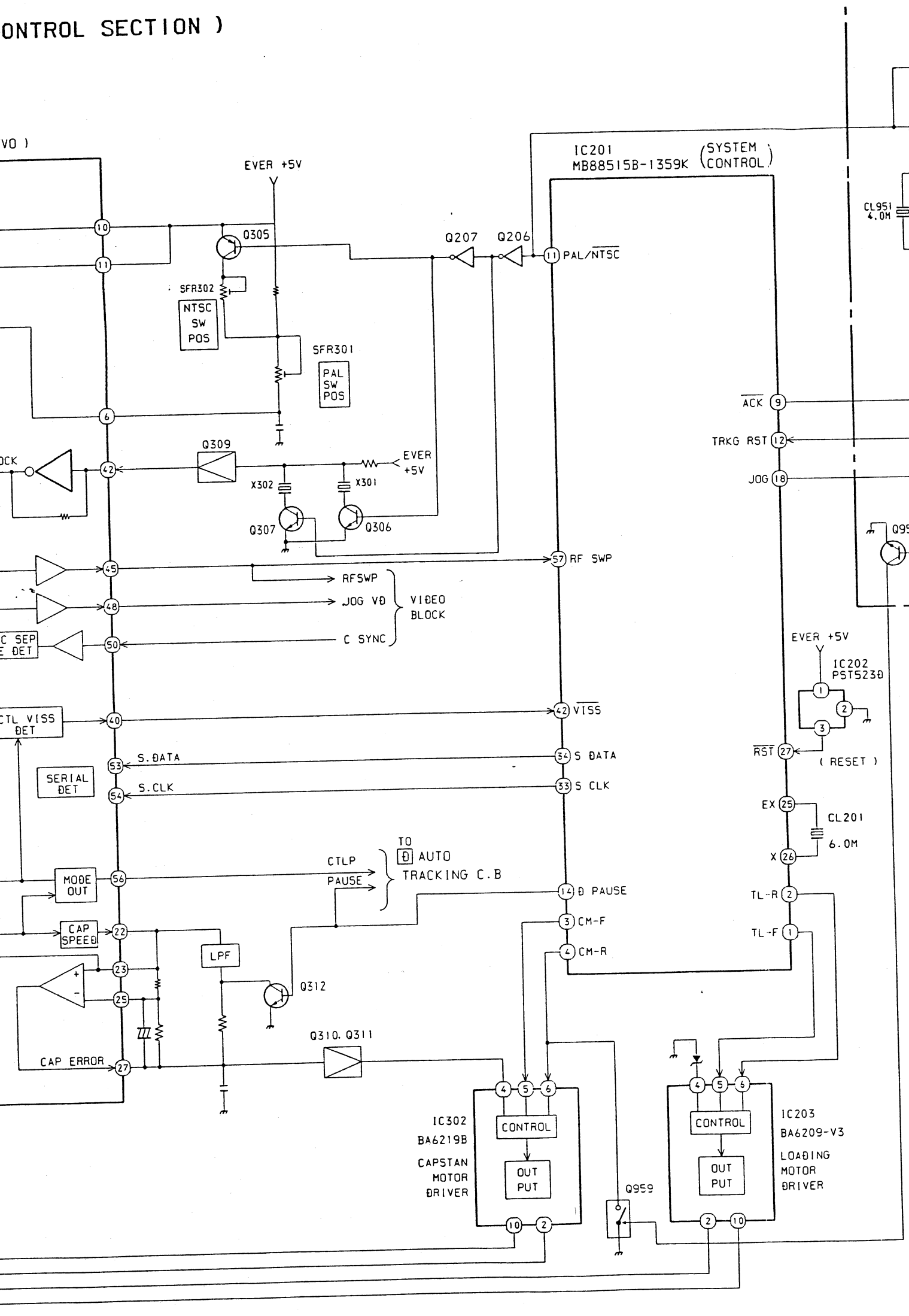
MECHANISM



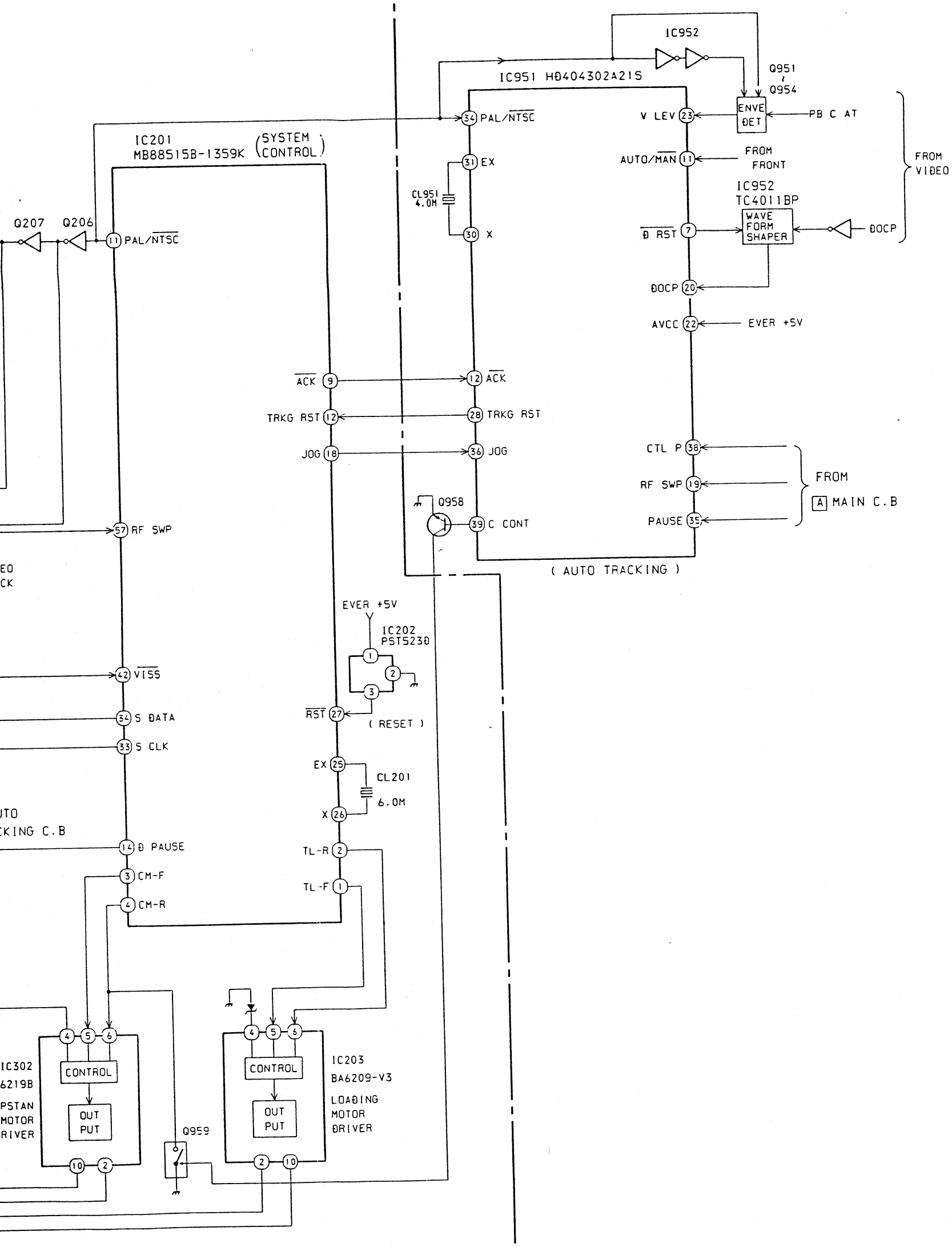
-MG300)

ONTROL SECTION)

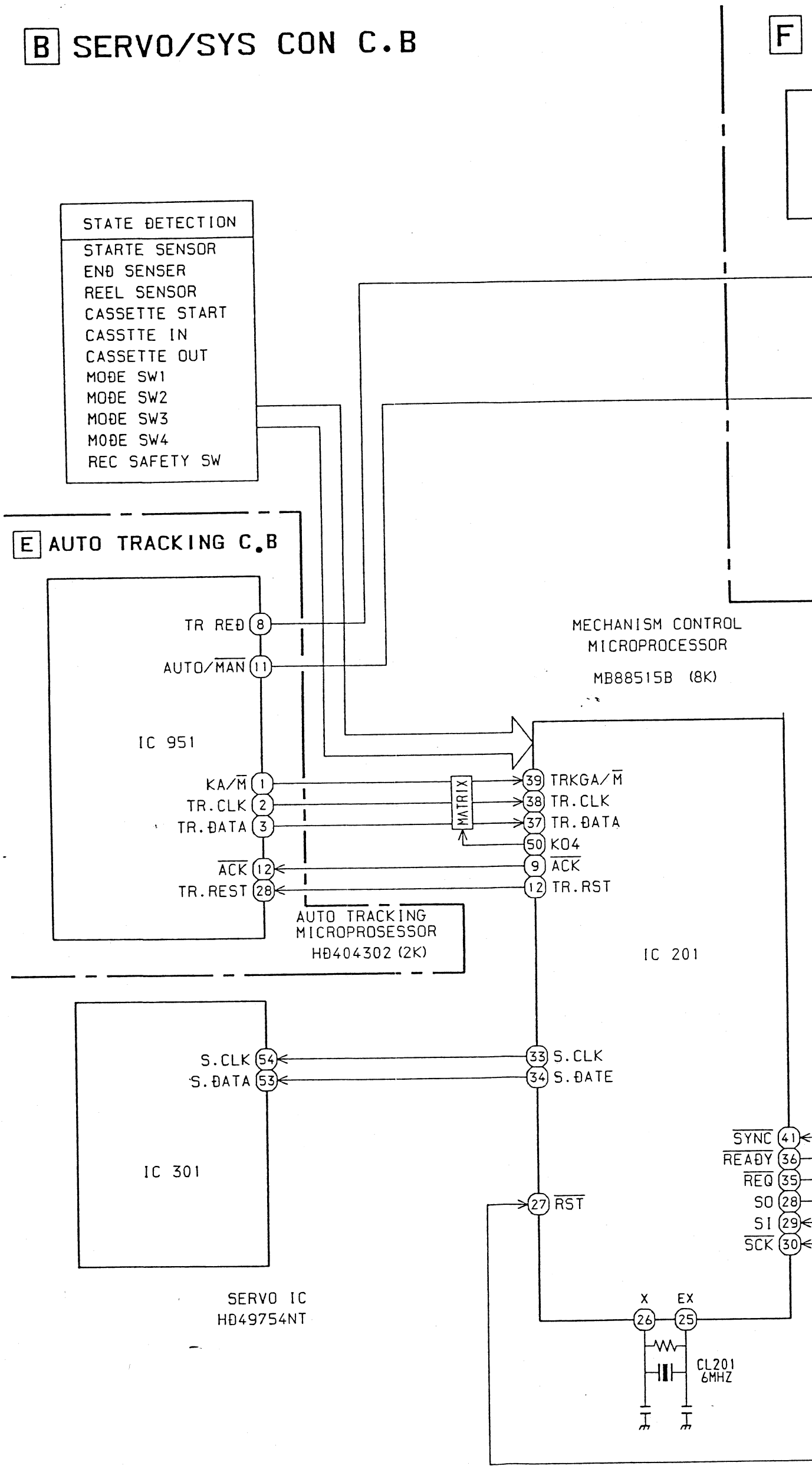
D AUTO TRACKING C.B



D AUTO TRACKING C.B



BLOCK DIAGRAM-3



C.B

F FRONT C.B

IC 902
EP ROM
BR93C46
ÐÐ SK ÐI CS
4 2 3 1

REG 5V
ÐÐ28
R Q901 AUTO TRAKKIN
PAL LEÐ
MESECAM LEÐ
NTSC3.58 LEÐ
NTSC4.43 LEÐ

35 36 37 38
PAL MESECAM NTSC3.58 NTSC4.43

11 VCR
15 ROM CS
14 ROM ÐO
13 ROM CLK
12 ROM ÐI

G1~G10 40 ~ 49 → 10 → FL 901 (ÐISPLAY)

A~J 1 ~ 4, 58 ~ 63 → 10 → FL 901 (ÐISPLAY)

8 → KEY MATRIX

KMO ~ KM3 21 ~ 24 ← 4 ← KEY MATRIX

SYNC ÐET 10 ←
S MUTE 20 →
AFTH 26 ←
AFTL 27 ←
PPO 29 →
K MUTE 50 →
AFTÐ 51 →
BANÐ 1 52 →
BANÐ 2 53 →
→ A MAIN C.B

BUZZAER 16 → B SERVO/SYS.CO

REMOCON 9 ← IC903 SBX1610-52

MECHANISM CONTROL
MICROPROCESSOR

MB88515B (8K)

TIMER
MICROPROCESSOR
UPÐ75212CW
(12K)

IC 901

IC 201

MATRIX
39 TRKGA/M
38 TR.CLK
37 TR.ÐATA
50 KO4
9 ACK
12 TR.RST

RACKING
ROSESSOR
4302 (2K)

33 S.CLK
34 S.ÐATE

27 RST

SYNC 41 ← 19 SYNC
READY 36 → 7 READY
REQ 35 → 6 REQ
SO 28 → 8 SO
SI 29 ← 18 SI
SCK 30 ← 17 SCK
39 RST

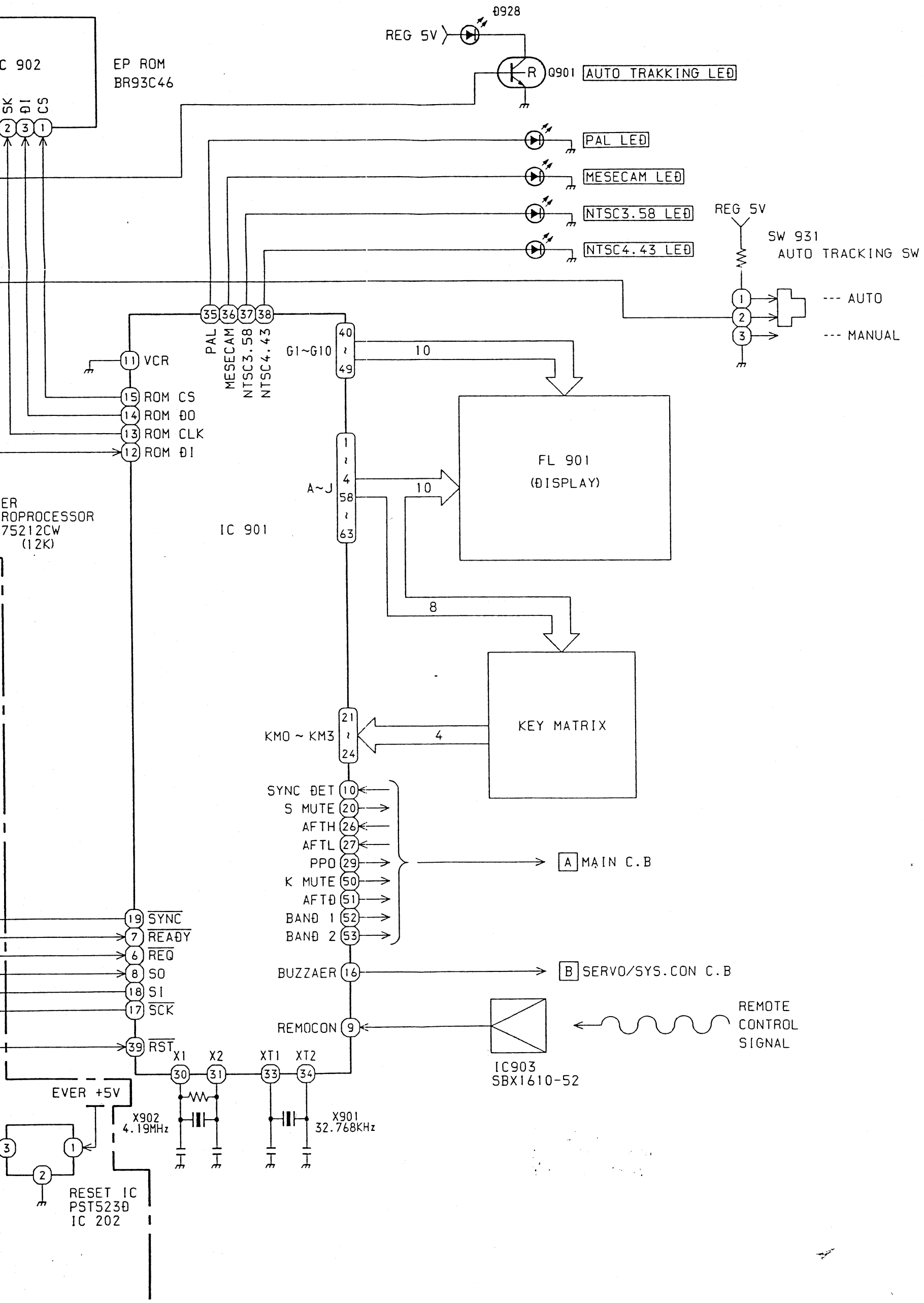
X 26 EX 25
CL201 6MHZ

EVER +5V
3 1 2
RESET IC
PST523Ð
IC 202

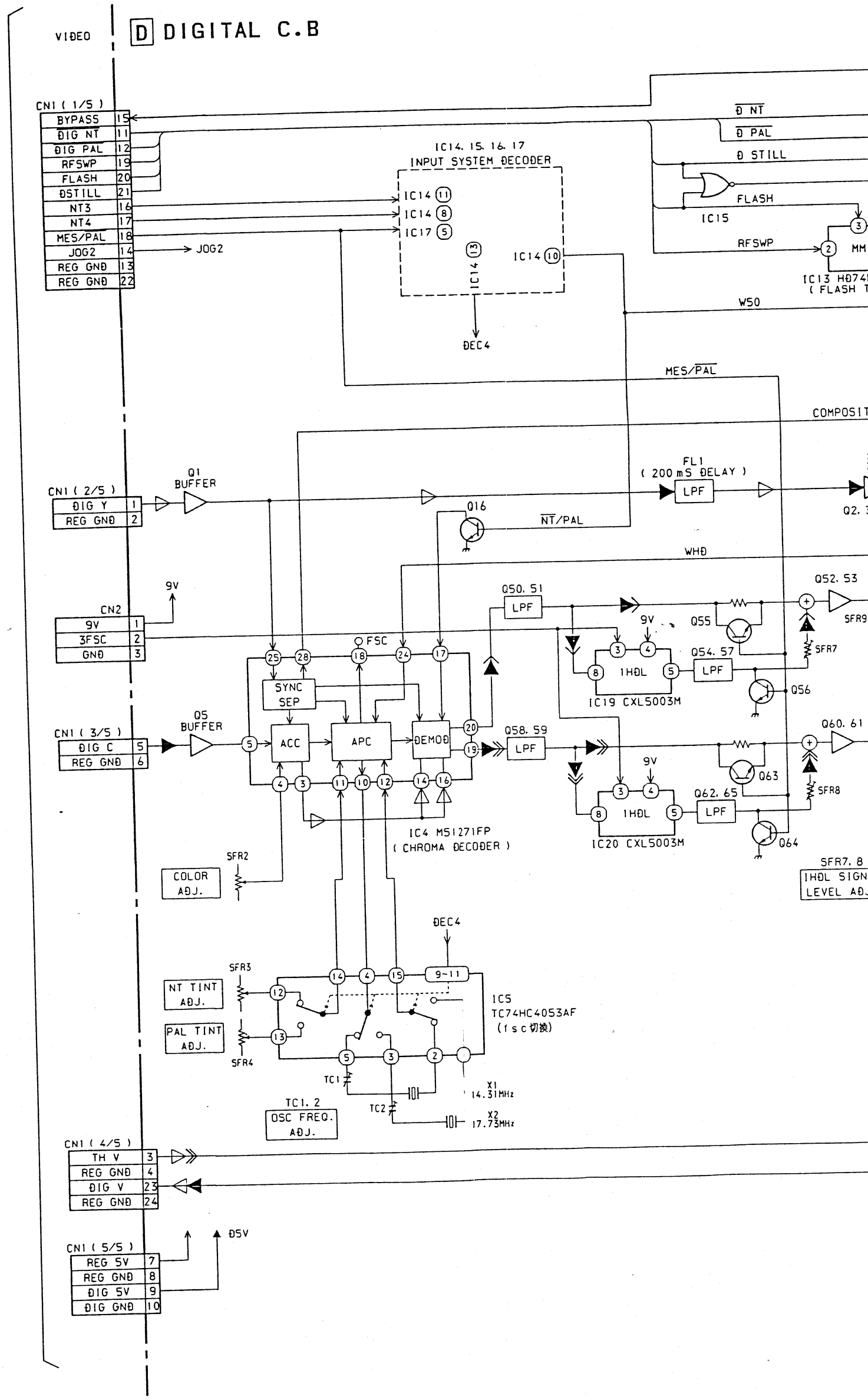
X902 4.19MHz
X1 30 X2 31

XT1 33 XT2 34
X901 32.768KHz

ONT C.B


Ð928
REG 5V
R
Q901
AUTO TRAKKING LEÐ
PAL LEÐ
MESECAM LEÐ
NTSC3.58 LEÐ
NTSC4.43 LEÐ
REG 5V
SW 931
AUTO TRACKING SW
--- AUTO
--- MANUAL
C 902
EP ROM
BR93C46
SK
ÐI
CS
2
3
1
35
36
37
38
PAL
MESECAM
NTSC3.58
NTSC4.43
11 VCR
15 ROM CS
14 ROM ÐO
13 ROM CLK
12 ROM ÐI
G1~G10
40 ~ 49
10
FL 901
(ÐISPLAY)
A~J
1 ~ 4
58 ~ 63
10
IC 901
ER
ROPROCESSOR
75212CW
(12K)
8
KEY MATRIX
KMO ~ KM3
21 ~ 24
4
SYNC ÐET 10
S MUTE 20
AFTH 26
AFTL 27
PPO 29
K MUTE 50
AFTÐ 51
BANÐ 1 52
BANÐ 2 53
A MAIN C.B
19 SYNC
7 READY
6 REQ
8 SO
18 SI
17 SCK
39 RST
BUZZAER 16
B SERVO/SYS.CON C.B
REMOCON 9
REMOTE
CONTROL
SIGNAL
IC903
SBX1610-52
X1
X2
XT1
XT2
30
31
33
34
EVER +5V
X902
4.19MHz
X901
32.768KHz
3
1
2
RESET IC
PST523Ð
IC 202

BLOCK DIAGRAM-4



IC12 TC74HC157F
IC14, 15 TC74HC02AF
IC16 M74HC08FP
IC17 TC4030BF

IC12, 14, 15, 16, 17
OUTPUT SYSTEM DECODER

Ð NT
Ð PAL
Ð STILL
FLASH
IC15
RFSWP
IC13 HØ74HC221FP
(FLASH TIMER)

BYPASS
MUTE
ENC4
ENC3
RSØ
WE
WSØ
ENC3
ENC4
ØSV
IC18 PST523Ø
RESET
XCLR

JOG2
IC7 TC74HCU04AF
Ø1 1T363
VCO
TC5
AFC
AØJ.
YCLK
IC21 TC7W04F
Q15
NOV
DETECT
Ø4
ØET V
IC1 MB87813A

MES/PAL
COMPOSITION SYNC
NT/PAL
FL1
(200mS ØELAY)
LPF
SFR1
ØIG Y
LEVEL AØJ.
Q2, 3, 4
WOB
WHØ
AFC
INTERFACE
SYNC GEN.
WRITE
TIMING
GEN.
READ
TIMING
GEN.
IC10 MB40778
(8BIT Ø/A CONV)
YØACK
FILTERS
1HØL
Ø/A
LPF
FL3
Q30, 3

Q50, 51
LPF
9V
Q55
Q54, 57
LPF
SFR7
Q56
1HØL
IC19 CXL5003M
Q52, 53
SFR9
CLAMP
SEL Y
SEL U
SEL V
AØCK
11~13
CLP
CLP
CLP
A/Ø
MPX
I/O MPX
ØE-MPX
SW
ØEMØØ
Ø/A
BPF
FL2
Q20, 2
CØACK
IC9 MB40776
(6BIT Ø/A CONV)

Q58, 59
LPF
9V
Q63
Q62, 65
LPF
SFR8
Q64
1HØL
IC20 CXL5003M
Q60, 61
SFR10
IC6 PC661G
(A/Ø CONV.)

20~27, 30, 31
36~39
51, 52, 55~62
41~44
ENC3, 4
ENCCK
5~8, 10~13, 16
1/2FIELØ
MEMORY
IC2
IC3
LH2464-10
(4BIT-64K WORØ ØRAM)
ENC3
OSC
X3 14.31MHz
ENC4
OSC
X4 17.73MHz
IC8
TC74HC00AF
(CHROMA ENCØDE
CLOCK GEN.)

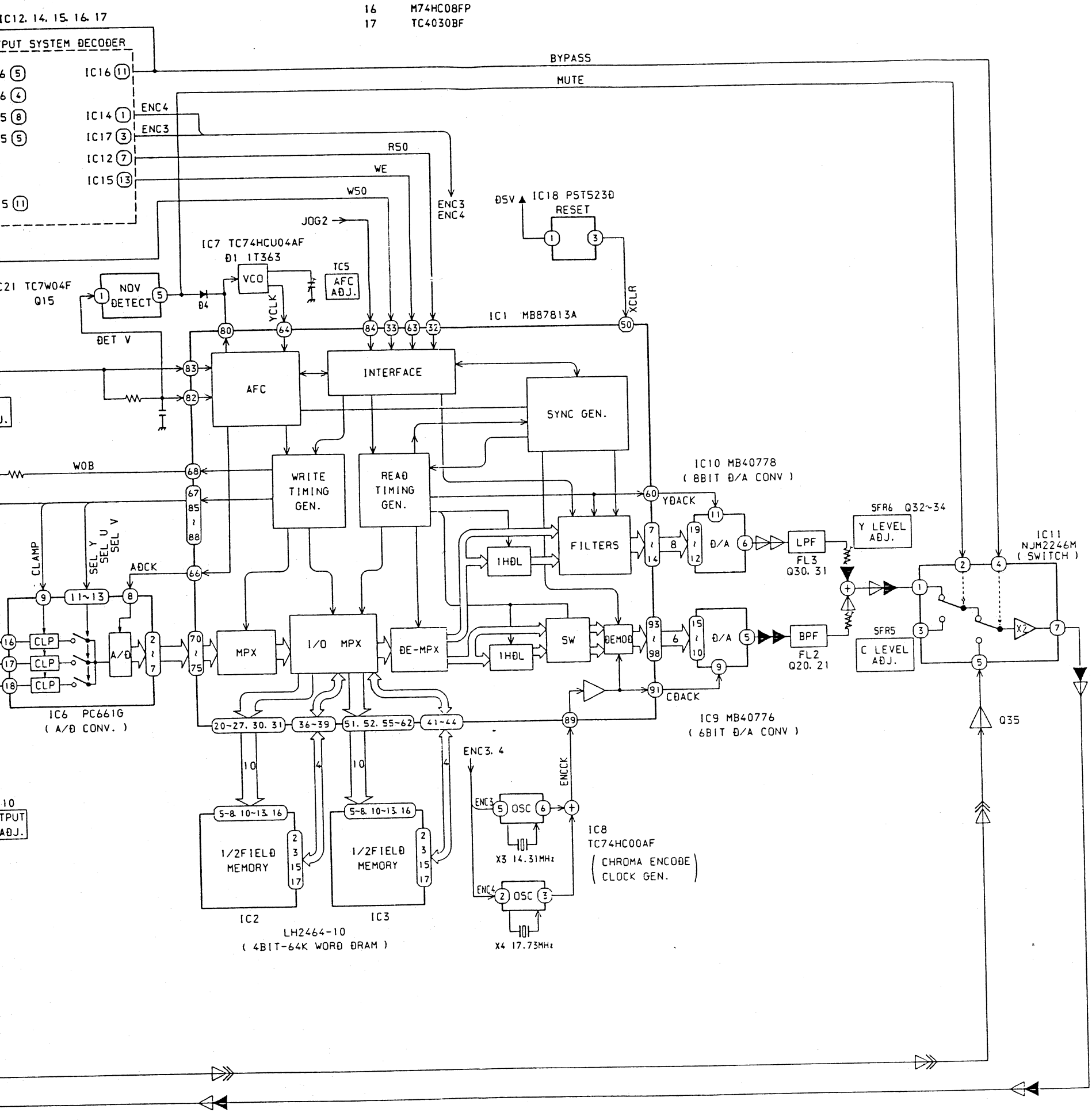
SFR7, 8
1HØL SIGNAL
LEVEL AØJ.
SFR9, 10
U, V OUTPUT
LEVEL AØJ.

IC5
TC74HC4053AF
(fsc切換)

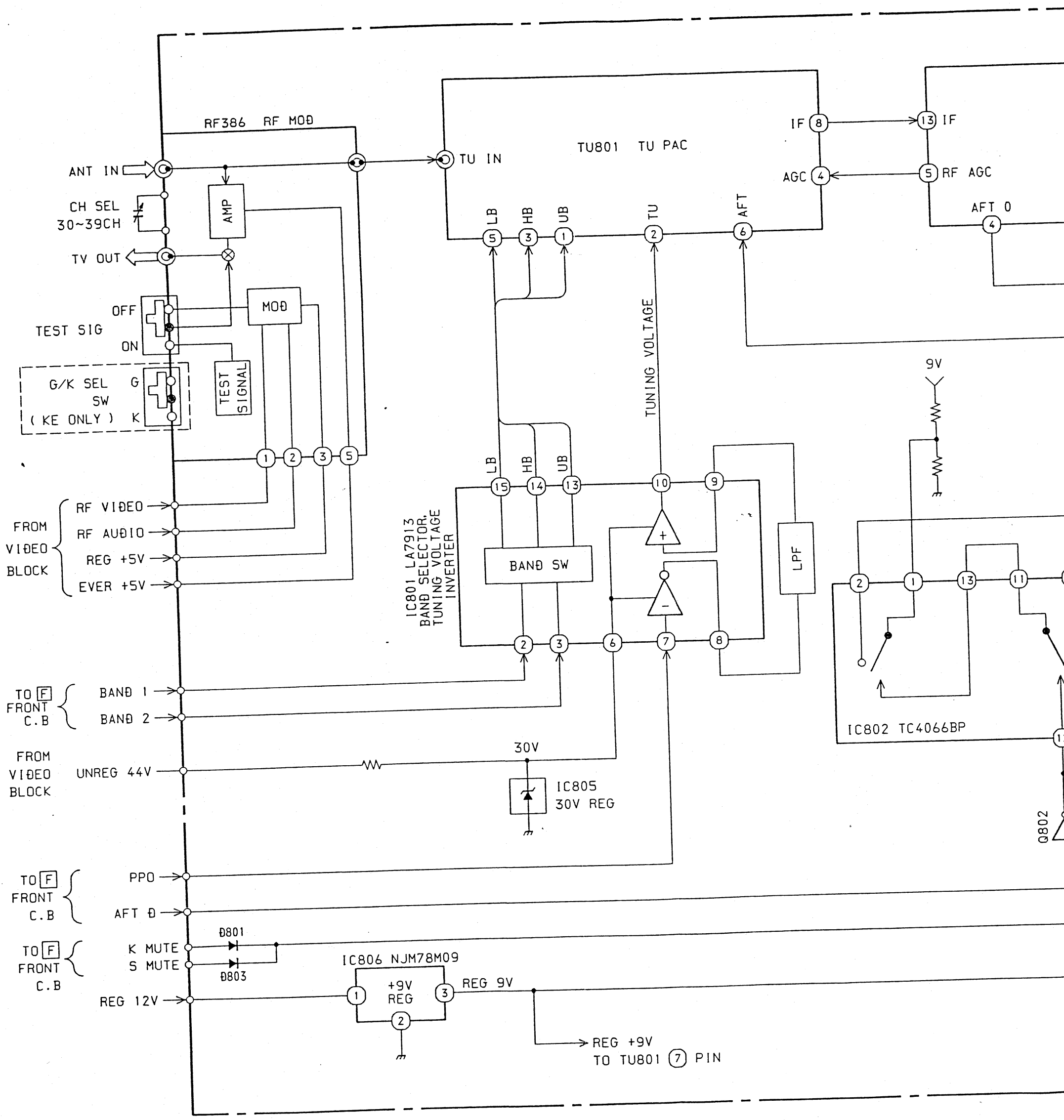
X1
.31MHz
X2
.73MHz

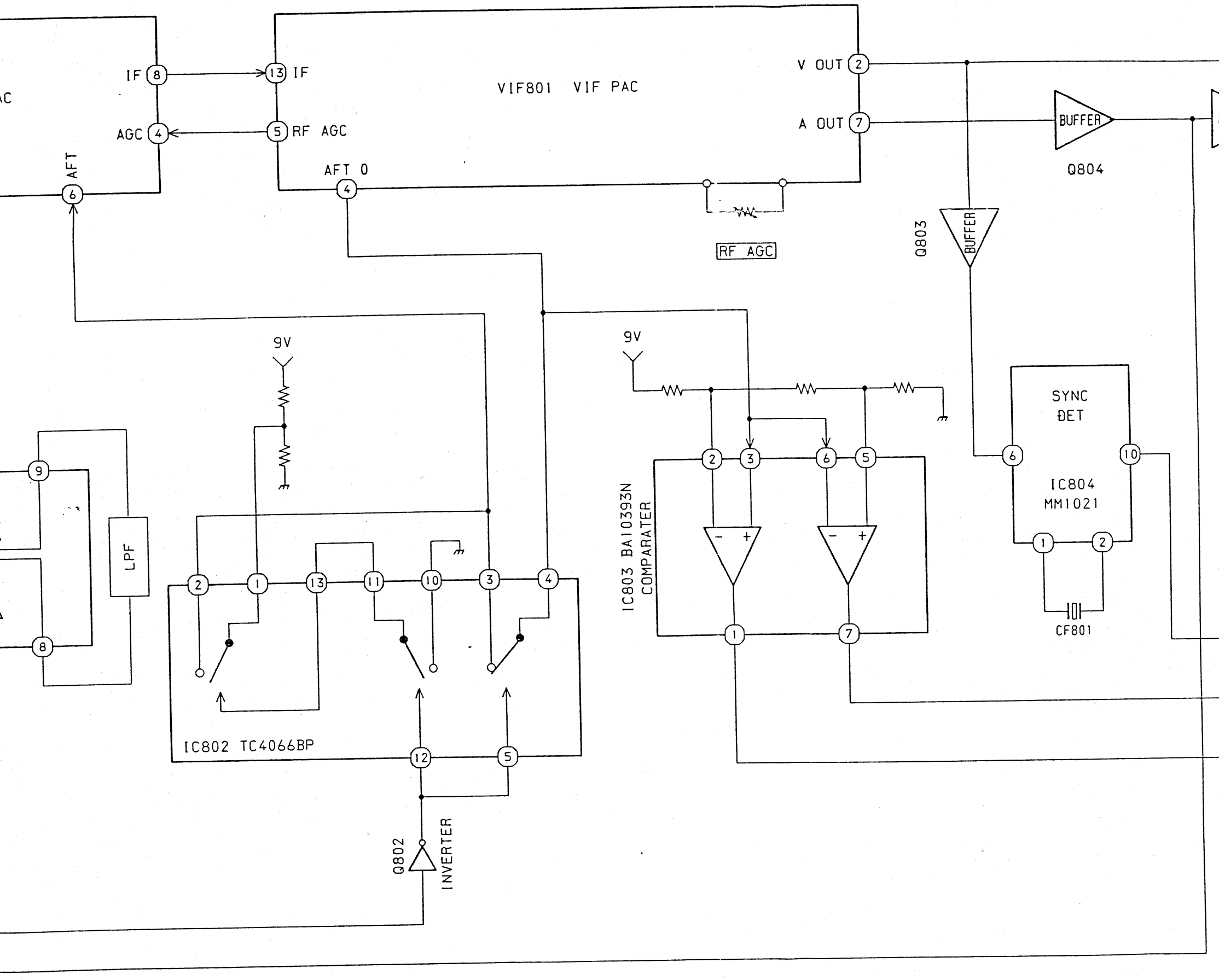
ØIGITAL Y
ØIGITAL C
ØIGITAL VIØEO
TH Y
ØA Y
ØA C
R-Y (V)
B-Y (U)

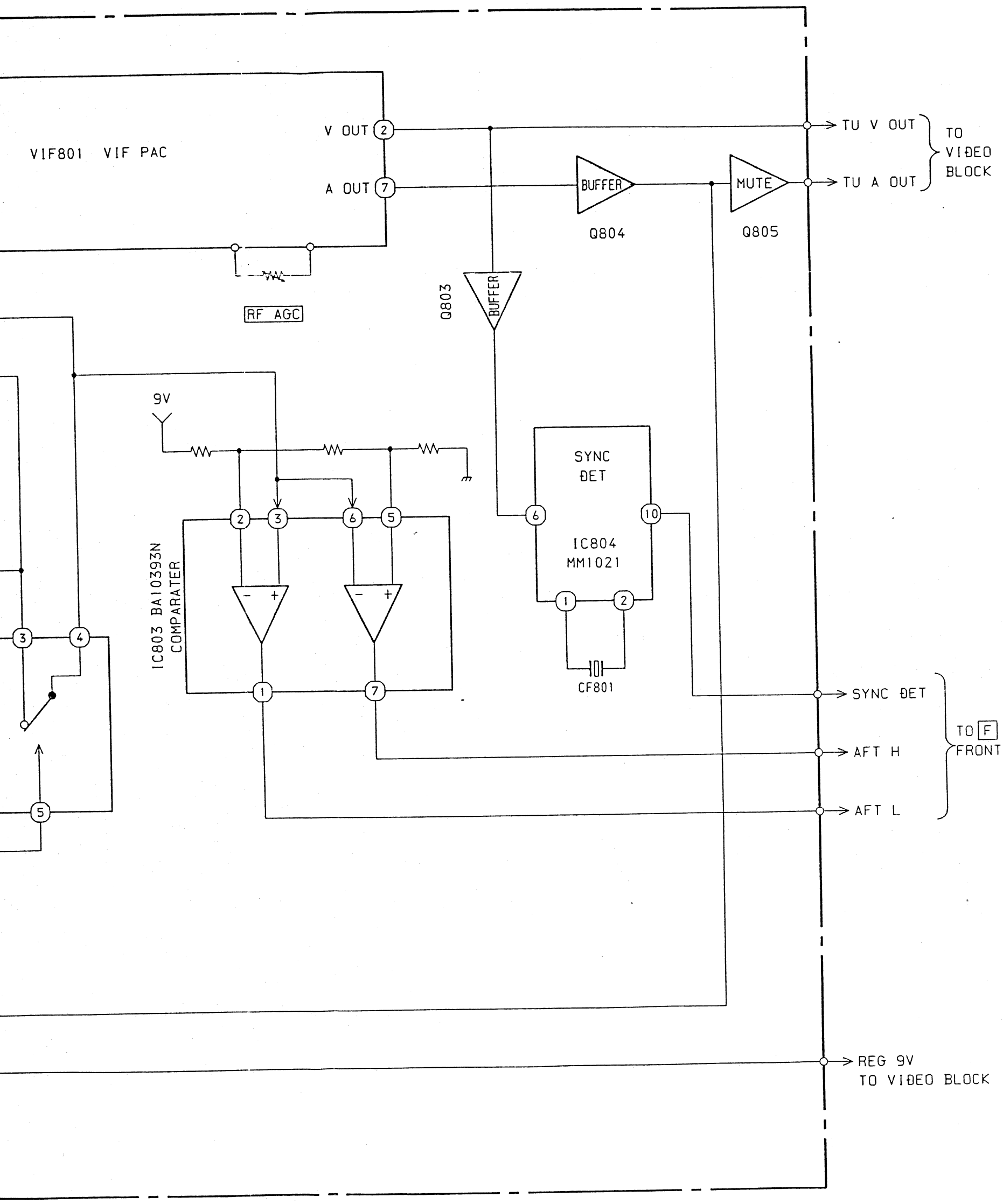
IC12 TC74HC157F
14, 15 TC74HC02AF
16 M74HC08FP
17 TC4030BF



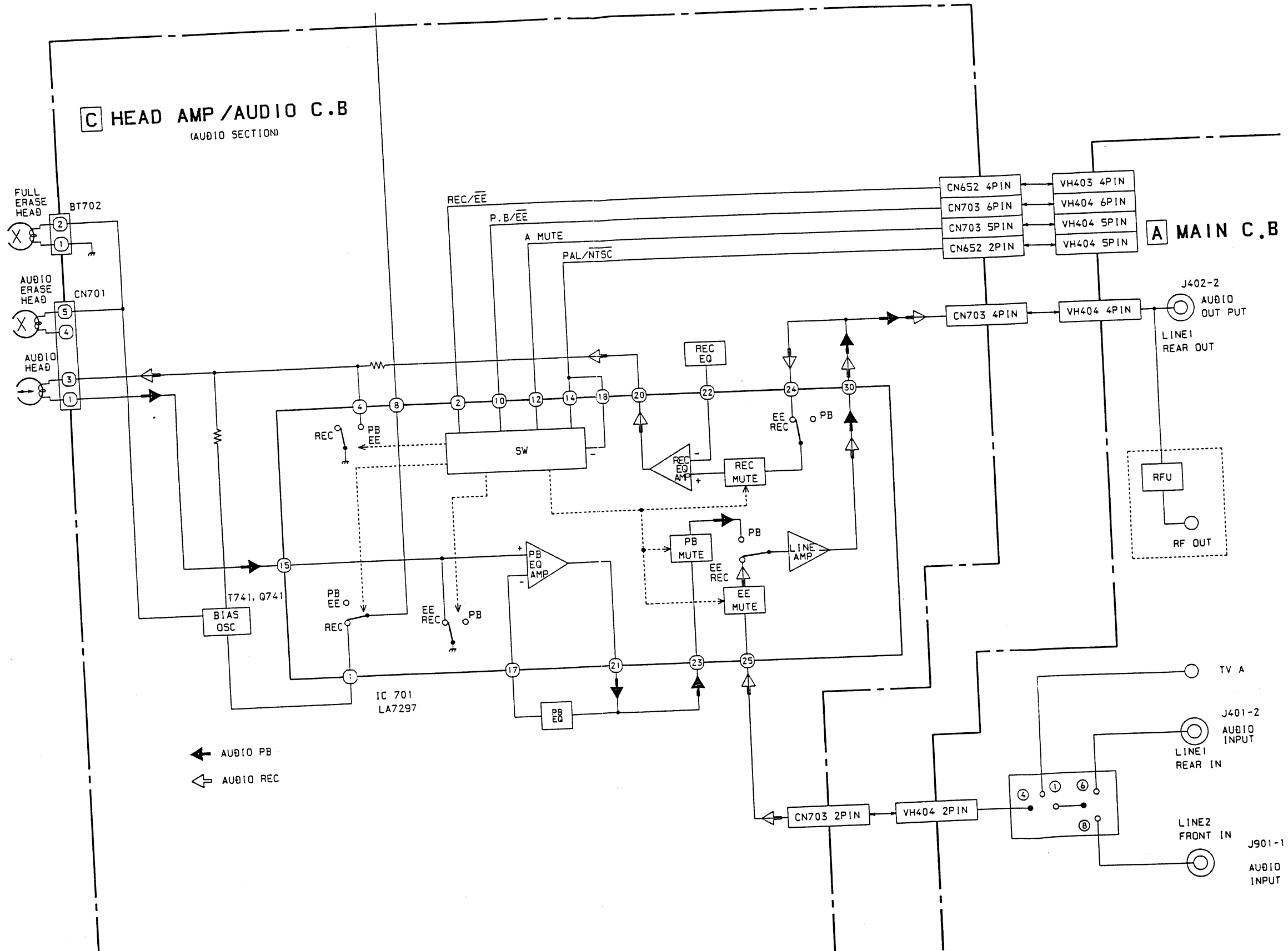
BLOCK DIAGRAM-5



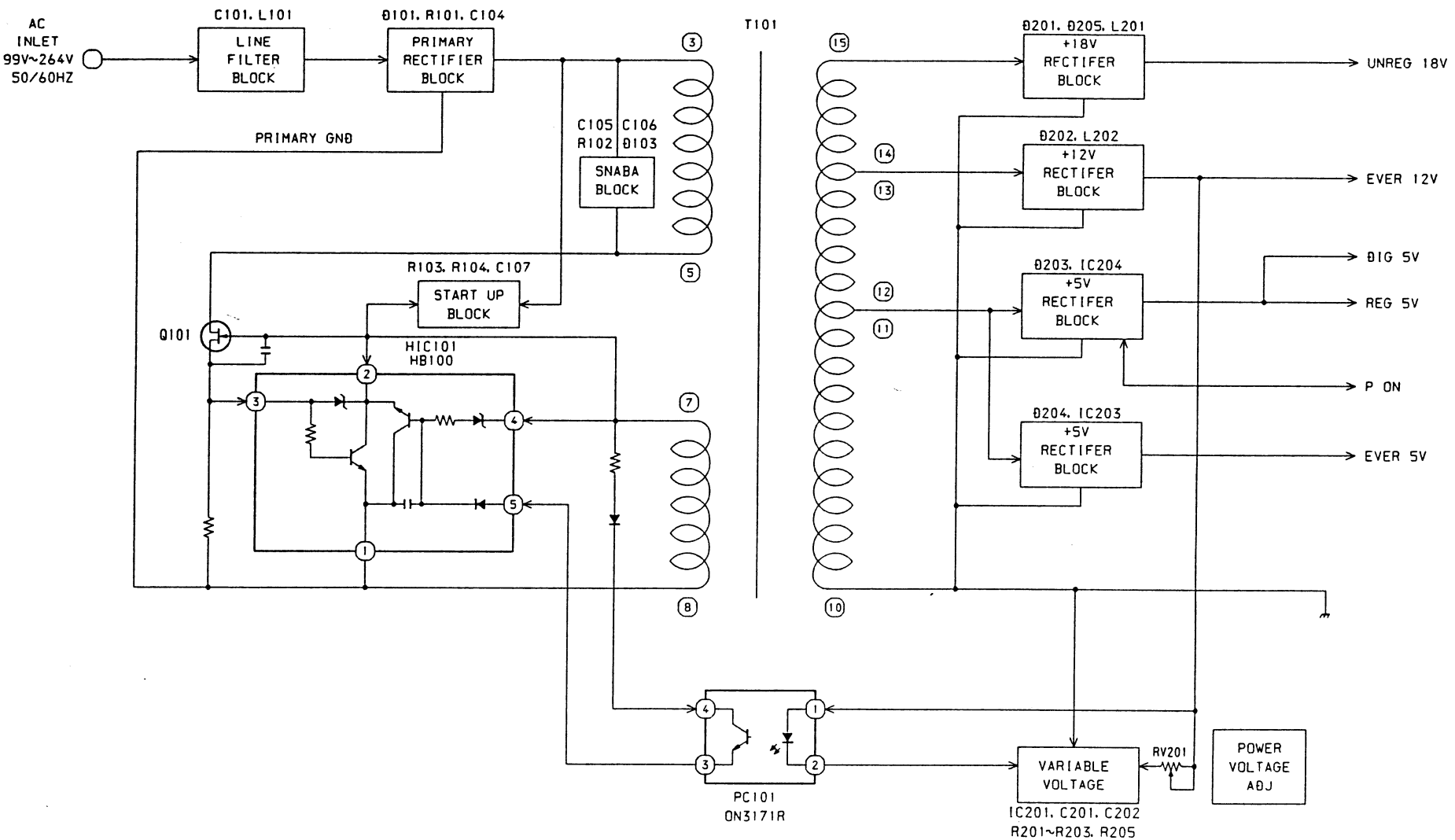

IF 8
AGC 4
AFT 6
13 IF
5 RF AGC
AFT O 4
VIF801 VIF PAC
V OUT 2
A OUT 7
RF AGC
BUFFER
Q804
Q803
BUFFER
9V
9V
SYNC DET
IC804 MM1021
6
10
1
2
CF801
IC803 BA10393N COMPARATER
2
3
6
5
1
7
LPF
9
8
IC802 TC4066BP
2
1
13
11
10
3
4
12
5
Q802
INVERTER
PIN


VIF801 VIF PAC
V OUT 2
A OUT 7
RF AGC
Q803
BUFFER
BUFFER
Q804
MUTE
Q805
TU V OUT
TU A OUT
TO VIÐEO BLOCK
9V
IC803 BA10393N COMPARATER
SYNC ÐET
IC804 MM1021
CF801
SYNC ÐET
AFT H
AFT L
TO F FRONT C.B
REG 9V TO VIÐEO BLOCK

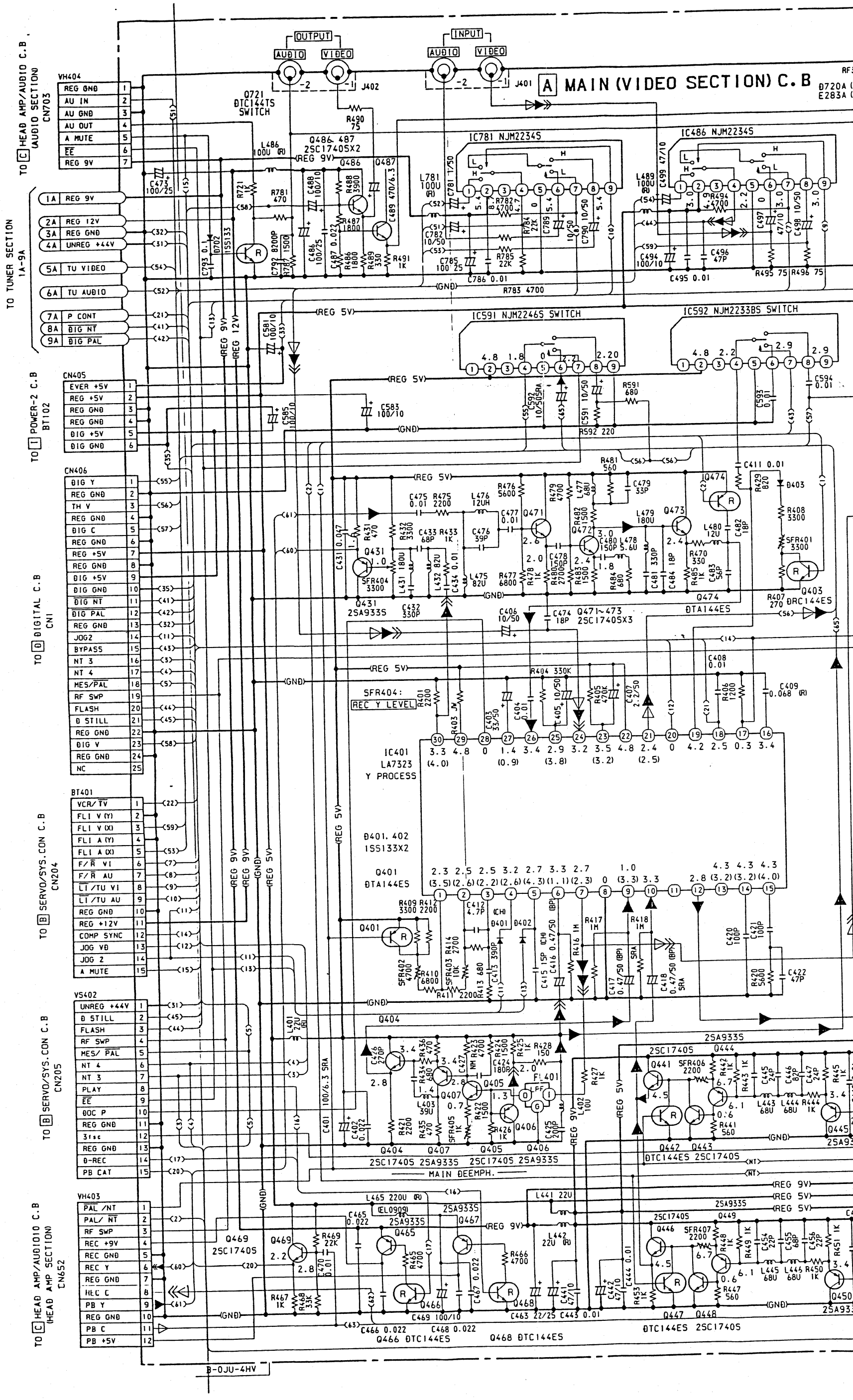
BLOCK DIAGRAM-6



BLOCK DIAGRAM-7



SCHEMATIC DIAGRAM – 1



A MAIN (VIDEO SECTION) C.B

RF386
Ð720A (SH)
E283A (KE)

RF OUT
AERIAL
VIDEO AUDIO +B NC +BST

IC486 NJM2234S

IC592 NJM2233BS SWITCH

IC601
R/P INPUT SEL LIMITER
F/V CONVERTER

IC601 LA7311

Q507 ÐTA144ES
Q506 2SC1740S
Q505 ÐTA144ES
Q508 ÐTA144ES
Q504 2SC1740S

FL502 5.06MCF
FL501 4.21MCF

Ð601, 602 1SS133X2

Q513 ÐTC144ES

IC501 LA7333 C PROCESS

Q501 2SC1740S

Q503 2SC1740S

Q560 ÐTA144ES

Q555, 557, 569 2SC1740SX4

ÐL502 AÐL-FE2544W PAL2H

ÐL503 AÐL-FN1334W NT3.581H

ÐL501 AÐL FN1344W NT4.431H

ÐTA144ES ÐTA144ES
Q563 Q562

Q558 ÐTA144ES
Q568 2SC1740S

Q564, 565 2SC1740SX2

Q567 2SC1740S
Q566 ÐTA144ES
Q570 2SC1740S

Ð553 1SS133
Ð555 1SS133

Ð471, 472 1SS133X2

IC471 TC4049BP

IC442 CXL5001P

Q471~473 2SC1740SX3

Q474 ÐTA144ES

Q403 ÐRC144ES

Q442 Q443 ÐTC144ES 2SC1740S

Q447 Q448 ÐTC144ES 2SC1740S

Q441 Q444 Q445 Q446 Q449 Q450 2SA933S

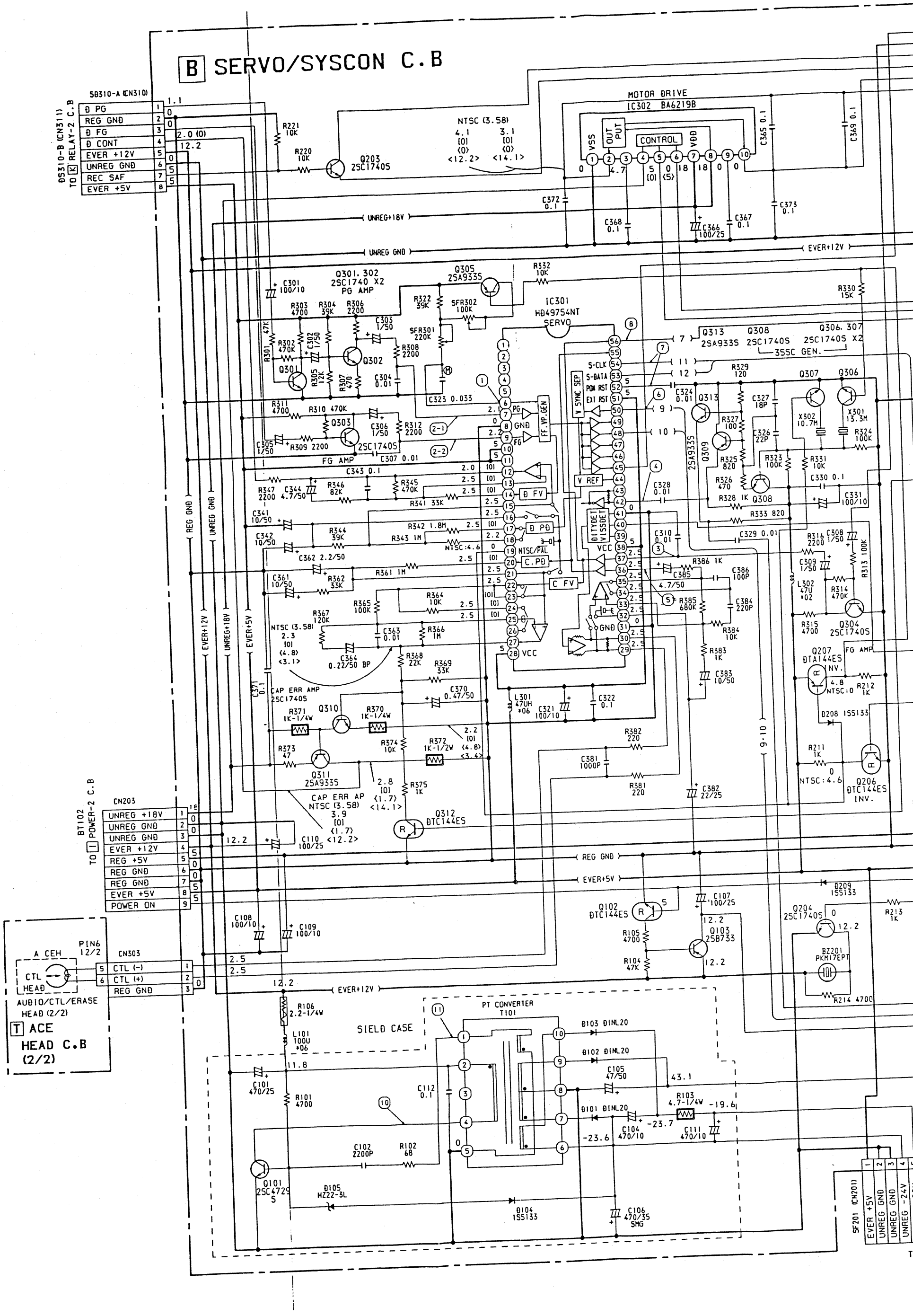
Q406 2SA933S

SFR401: AGC
SFR402- CAR.
SFR403- ÐEV.
SFR405- PB Y LEVEL
SFR406- P. ÐOC
SFR407- NT ÐOC

IC441
PAL 1H CCÐ

IC442
NTSC 1H CCÐ

OUT
AERIAL
+B
NC
+BST
L487 22μ(R)
C490 47/10
L488 22U
C493 47/10
C492 0.01
IC601
R/P INPUT SEL LIMITER
F/V CONVERTER
R611 15K
C607 0.01
C608 0.01
R608 1M
R605 1M
DTC144ES
Q601
SWITCH
R610 470
R609 470
IC601 LA7311
4.8 4.8 4.5 3.9 0 3.9
(4.7)
2.0 2.0 0 4.0
D603 1SS133
(REG 5V)
(GND)
L601 22U
C601 10/50
C602 0.01
C603 3.3/50
D601
D602
R601 22K
R602 18K
C604 3.3/50
R603 820
C605 100/10
R604 10K
R613 150K
C606 4.7/50
D601. 602
1SS133X2
R506 22K
Q503 2SC1740S
R507 8200
3.8
R508 470
R504 100K
C513 100P
R505 4700
C514 0.01
L503 18U (J)
C517 43P (CH)
C518 0.047
C519 1/50
C512 0.01
3.1 2.2 4.1 4.8 3.8 3.8 2.9 4.4 4.8 2.2 0.4 4.4
(3.2)(1.8) (3.7)(2.2)
01 : AGC
C526 0.01
1.4 3.3 1.8
(1.6) 3.0 2.4 (2.5) 0 3.0 2.6 (3.1) 2.6 2.5 1.9
IC501 LA7333
C PROCESS
R525 10K
R526 10K
Q513
DTC144ES
C503 0.01
C504 0.022
C505 0.01
C506 1/50
C507 47P
R502 22K
R503 1200
3.3
Q501 2SC1740S
2.6
C508 1/50
C510 0.022
C511 0.047
R501 1K
C509 1/50
1SS133
D505
Q507 DTA144ES
Q506 2SC1740S
R513 1K
X502 4.43M
C522 0.01
D502
C523 0.01
R512 10K
R514 5600
C527 100/10
Q510 DTA144ES
2.5
FL502 5.06MCF
R520 2200
D504 1SS133
Q511 2SC1740S
1.1
R519 620
R521 820
C525 0.01
Q505 DTA144ES
Q504 2SC1740S
R510 1K
X501 3.58M
C520 0.01
D501
C521 0.01
R509 10K
R511 5600
D501 1SS133
Q508 DTA144ES
R523 1K
Q512 2SC1740S
2.5
1.9
R516 3300
Q509
FL501 4.21MCF
D503 1SS133
R515 1K
R517 1500
C524 0.01
1.1
R518 470
R524 1K
Q509 2SC1740S
VOLTAGE
VIDEO SIGNAL
:PB VIDEO SIGNAL
:PB Y SIGNAL
:PB CHROMA SIGNAL
:REC Y SIGNAL
:REC CHROMA SIGNAL
:REC VIDEO SIGNAL
Q536 DTA144ES
Q532 2SC1740S
Q534 DTA144ES
Q535 2SC1740S
Q537 DTA144ES
Q536
R535 1K
Q532
0.8 (1.4)
4.4 (3.6)
FL503 C5LLPF
R536 680
4.8 (0)
Q534
R537 1K
R539 0 5600
(4.7)
0
3.7
1.0 (1.2)
R540 820
C534 0.01
C532 0.01
R531 270
Q531
R532 270
R533 680
SFR531 1K
Q533
0.2 (0.8)
0.3 (0.5)
2SA933S
1.8 (3.1)
Q535
R538 22K
C535 0.01
C536 180P
L531 100U
R541 1K
Q537
REC C LEVEL
DTC144ES
Q538
Q560
Q560 DTA144ES
Q555 557. 569 2SC1740SX4
Q556
Q541 2SC1740S
R573 2700
D554 1SS134
C561 0.01
D554
C560 0.01
DL502 A0L-FE2544W PAL2H
L555 15U
R572 2200
R570 270
C566 0.01
Q569
2.0
Q557
1.6
1.4
R588 1K
R565 1K
R564 470
R563 18K
C556 0.047
R562 33K
2.7
R560 680
C570 0.01
R561 330
Q555
R558 270
R559 470
C555 0.01
Q552
R552 2200
D551 1SS133
FL505 4.43BPF
C551 0.01
R551 1K
R553 2200
Q551 DTA144ES
Q552 2SC1740S
DTA144ES DTA144ES
Q563 Q562
Q563 Q562
C501 47/10
C568 0.1
R578 33K
R577 1K
R576 680
R575 560
Q565
Q564
R579 330
R582 1K
R581 18K
C563 0.047
C562 0.01
R580 470
Q564. 565
2SC1740SX2
Q559 2SC1740S
Q558 DTA144ES
R569 2700
C558 0.01
D553 1SS133
DL503 A0L-FN1334W NT3.581H
Q568 2SC1740S
2.0
R566 270
C567 0.01
R587 1K
Q554
R555 2700
D552 1SS133
FL504 3.58BPF
C554 0.01
C553 0.01
R557 1K
R554 1K
Q554 2SC1740S
R556 2200
R574 470
R568 2200
Q553 DTA144ES
BT591
REG +9V
3FSC
REG GND
TO D DIGITAL C.B CN2
C502 0.022
L501 22U (R)
C452 0.01
C451 0.1
R446 1M
C453 0.022
C462 0.022
C460 0.1
R452 1M
C459 0.01
IC442
C 1H CCD
D471. 472
1SS133X2
IC471
TC4049BP
D471
R471 10K
D472
Q567 2SC1740S
Q566 DTA144ES
Q570 2SC1740S
2.0
1.4
R586 2700
DL501 A0L FN1344W NT4.431H
R583 270
C557 0.01
C564 0.01
C565 0.01
L551 15U
L552 15U
D555 1SS133
R589 1K
- CAR.
- DEV.
- PB Y LEVEL
- P. DOC
- NT DOC
IC441
PAL 1H CCD


B SERVO/SYSCON C.B
SB310-A (CN310)
BS310-B (CN311) TO K RELAY-2 C.B
Ð PG
REG GNÐ
Ð FG
Ð CONT
EVER +12V
UNREG GNÐ
REC SAF
EVER +5V
MOTOR ÐRIVE
IC302 BA6219B
VSS
OUTPUT
CONTROL
VDD
NTSC (3.58)
Q203 2SC1740S
R221 10K
R220 10K
C365 0.1
C369 0.1
C372 0.1
C373 0.1
C368 0.1
C366 100/25
C367 0.1
UNREG+18V
UNREG GNÐ
EVER+12V
Q301. 302 2SC1740 X2 PG AMP
Q305 2SA933S
IC301 HÐ49754NT SERVO
R332 10K
R330 15K
C301 100/10
R303 4700
R304 39K
R306 2200
R322 39K
SFR302 100K
SFR301 220K
R301 47K
R302 470K
C302 1/50
Q302
R308 2200
C303 1/50
Q301
R305 12K
R307 470
C304 0.01
C323 0.033
R311 4700
R310 470K
Q303
C306 1/50
R312 2200
C305 1/50
R309 2200
2SC1740S
C307 0.01
FG AMP
PG
GNÐ
FG
FF. VP. GEN
V SYNC SEP
S-CLK
S-ÐATA
PÐN RST
EXT RST
Q313 2SA933S
Q308 2SC1740S
Q306. 307 2SC1740S X2
3SSC GEN.
R329 120
Q307
Q306
C324 0.01
C327 18P
C326 22P
X302 10.7M
X301 13.3M
R324 100K
R327 100
R325 820
R323 100K
R331 10K
R326 470
R328 1K
C330 0.1
C331 100/10
C328 0.01
R333 820
V REF
Ð/TVÐET/VISSÐET
VCC
GNÐ
C329 0.01
C310 0.01
R386 1K
C385 4.7/50
C386 100P
R385 680K
C384 220P
R384 10K
R383 1K
C383 10/50
R316 2200
C308 1/50
C309 1/50
R313 100K
L302 47U *02
R314 470K
R315 4700
Q304 2SC1740S
Q207 ÐTA144ES INV.
FG AMP
R212 1K
Ð208 1SS133
R211 1K
Q206 ÐTC144ES INV.
C343 0.1
R347 2200
C344 4.7/50
R346 82K
R345 470K
R341 33K
C341 10/50
R342 1.8M
R343 1M
C342 10/50
R344 39K
C362 2.2/50
NTSC/PAL
C.PÐ
C FV
Ð FV
Ð PÐ
C361 10/50
R362 33K
R361 1M
R365 100K
R364 10K
R367 120K
C363 0.01
R366 1M
C364 0.22/50 BP
R368 22K
R369 33K
C371 0.1
CAP ERR AMP 2SC1740S
C370 0.47/50
Q310
R371 1K-1/4W
R370 1K-1/4W
R374 10K
R372 1K-1/2W
R373 47
Q311 2SA933S
CAP ERR AP NTSC (3.58)
R375 1K
Q312 ÐTC144ES
L301 47UH *06
C321 100/10
C322 0.1
R382 220
C381 1000P
R381 220
C382 22/25
9.10
BT102 TO 1 POWER-2 C.B
CN203
UNREG +18V
UNREG GNÐ
UNREG GNÐ
EVER +12V
REG +5V
REG GNÐ
REG GNÐ
EVER +5V
POWER ON
C110 100/25
C108 100/10
C109 100/10
REG GNÐ
EVER+5V
Q102 ÐTC144ES
C107 100/25
Q103 2SB733
R105 4700
R104 47K
Ð209 1SS133
Q204 2SC1740S
BZ201 PKM17EPT
R214 4700
R213 1K
A CEH
PIN6 12/2
CN303
CTL HEAÐ
CTL (–)
CTL (+)
REG GNÐ
AUÐIO/CTL/ERASE HEAÐ (2/2)
T ACE HEAÐ C.B (2/2)
R106 2.2-1/4W
L101 100U *06
SIELÐ CASE
PT CONVERTER T101
Ð103 ÐINL20
Ð102 ÐINL20
Ð101 ÐINL20
C105 47/50
R103 4.7-1/4W
C104 470/10
C111 470/10
C101 470/25
R101 4700
C112 0.1
C102 Z200P
R102 68
Q101 2SC4729 S
Ð105 HZ22-3L
Ð104 1SS133
C106 470/35 SMG
SF201 (CN201)
EVER +5V
UNREG GNÐ
UNREG GNÐ
UNREG –24V

MOTOR DRIVE
IC302 BA6219B

IC203 BA6209-V3
MOTOR DRIVE

IC201
MB88515B-1359K
SYTEM CONTROL

IC301
49754NT
SERVO

RA202 10K X 12
RA201 10K X 12
RA204 10K X 5
RA203 10K X10

Q313 2SA933S
Q308 2SC1740S
Q306. 307 2SC1740S X2
35SC GEN.
Q309 2SA933S
Q207 DTA144ES INV.
Q206 DTC144ES INV.
Q304 2SC1740S
Q102 DTC144ES
Q103 2SB733
Q202 2SA933S
Q204 2SC1740S

X302 10.7M
X301 13.3M

CL201 KBR6.0MES
IC202 PST-5230

BZ201 PKM17EPT

D103 D1NL20
D102 D1NL20
D101 D1NL20
D206 1SS133
D207 1SS133
D208 1SS133
D209 1SS133
D210 1SS133

L302 47U
L201 47UH

EVER+12V
REG GND
EVER+5V
13·14
1~8
9·10
2
VOLTAGE
NO MARK:PB
( ) :EE (TAPE
( ) :REC
[ ] :STILL
< > :CUE/REV

SF201 (CN201)
EVER +5V
UNREG GND
UNREG GND
UNREG -24V
UNREG -20V
REEL-FG
REQ
READY
SO
BUZZER
SCK
SI
SYNC
RST

TO F FRONT C.B
CN901

TP301
COMP SYNC
RFSWP
GND

ADJUSTMENT
TERMINAL

CN204
VCR/TV
F LI V (Y)
F LI V (X)
F LI A (Y)
F LI A (X)
F/R VI
F/R AU
LI/TU VI
LI/TU AU
REG GND
REG +12V
COMP SYNC
JOC V8
JOG 2
A MUTE

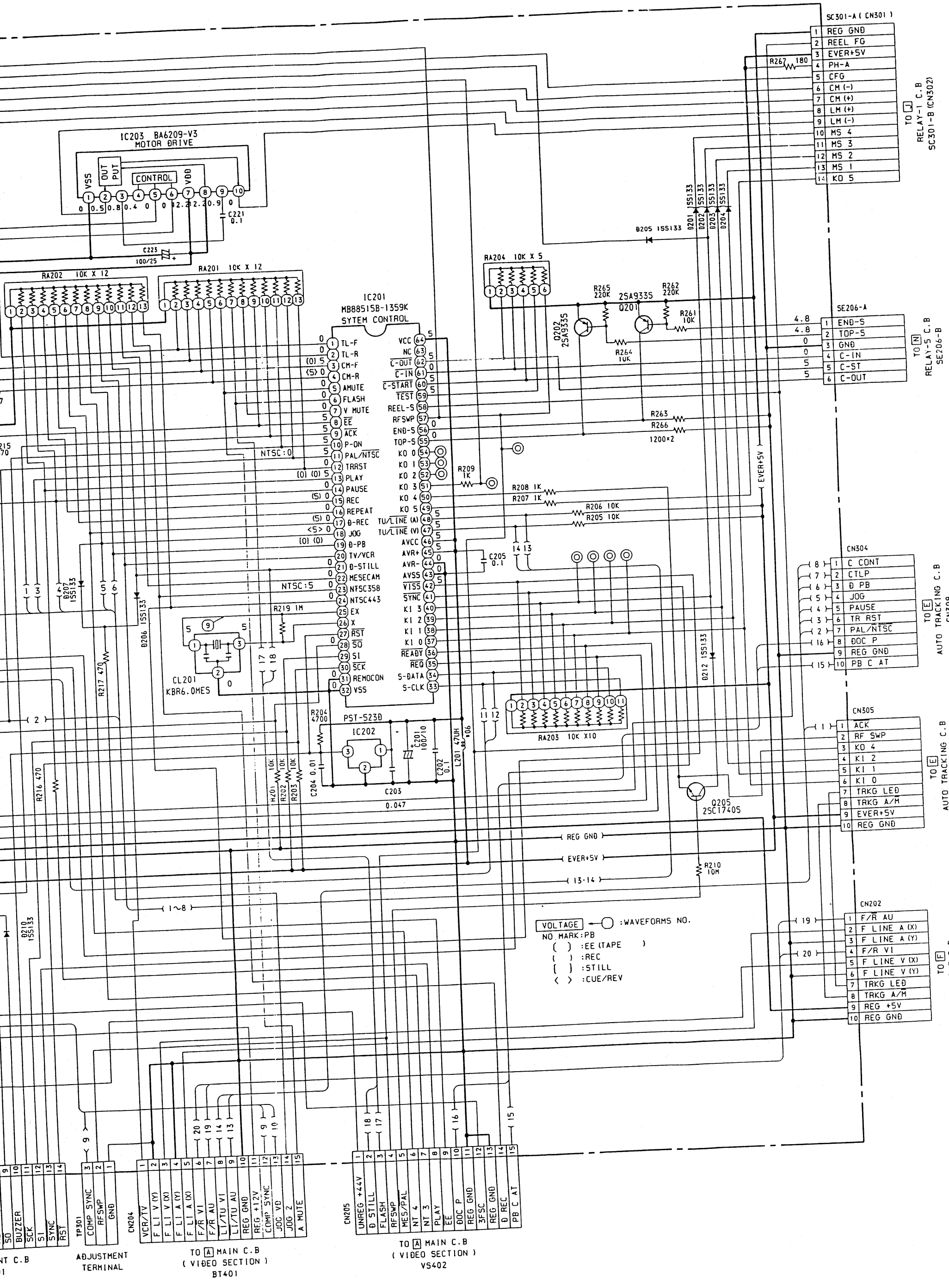
TO A MAIN C.B
(VIDEO SECTION)
BT401

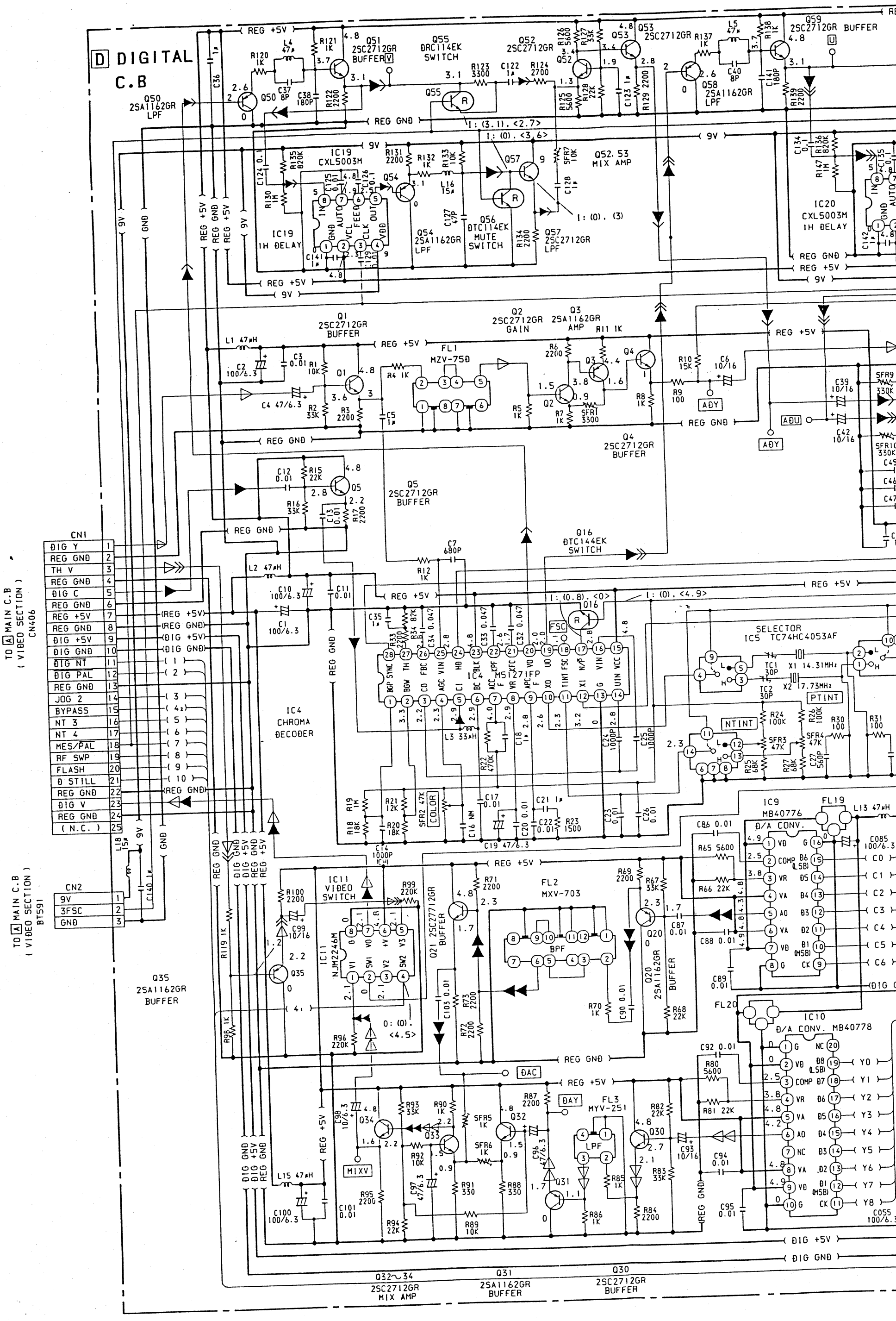
CN205
UNREG +44V
D STILL
FLASH
RFSWP
MES/PAL
NT 4
NT 3
PLAY
EE
DOC P
REG GND
3FSC
REG GND
D REC
PB C AT

TO A MAIN C.B
(VIDEO SECTION)
VS402

37

38

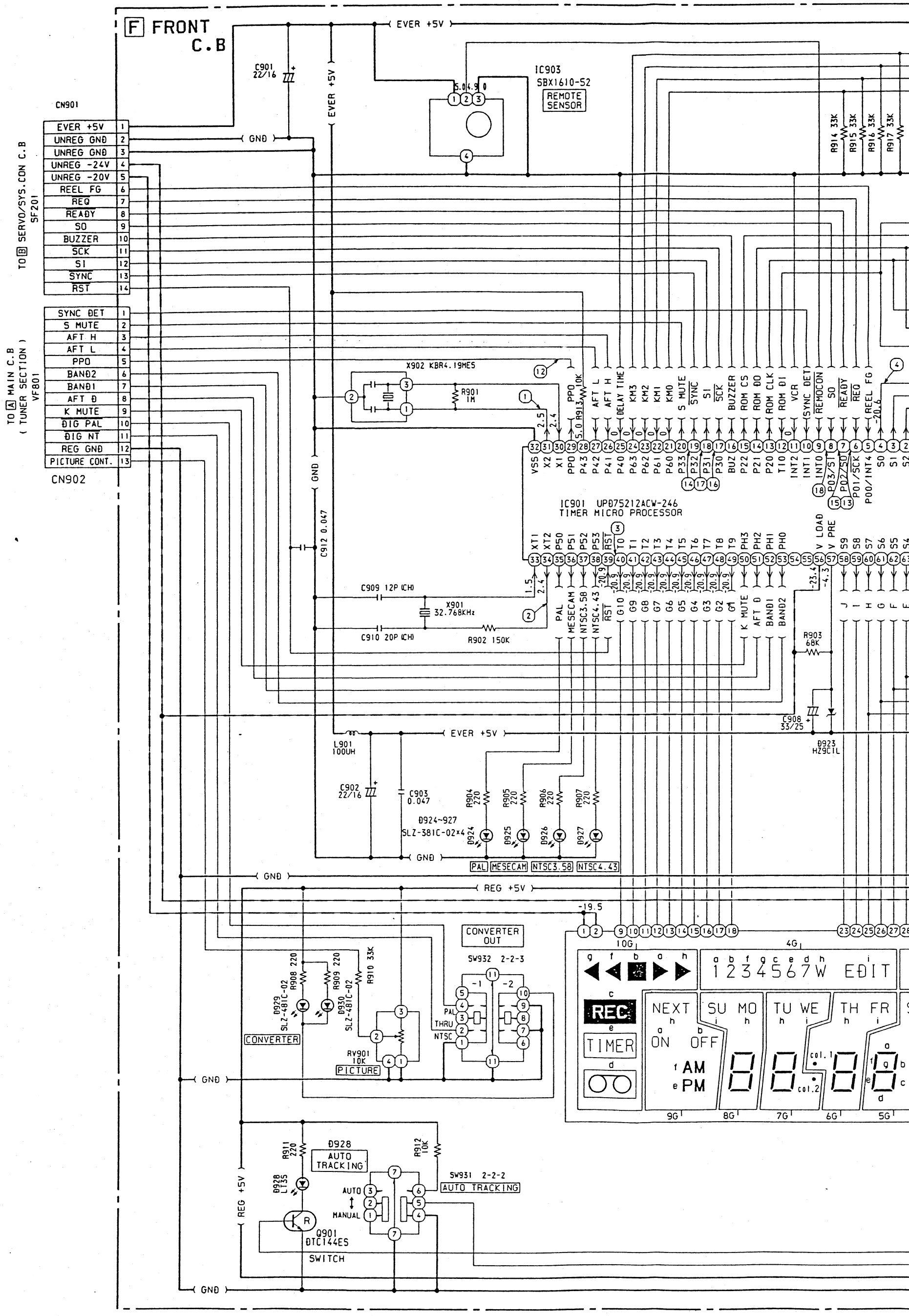

IC203 BA6209-V3
MOTOR DRIVE
VSS
OUTPUT
CONTROL
VDD
C221 0.1
C223 100/25
RA202 10K X 12
RA201 10K X 12
IC201
MB88515B-1359K
SYTEM CONTROL
TL-F
TL-R
CM-F
CM-R
AMUTE
FLASH
V MUTE
EE
ACK
P-ON
PAL/NTSC
TRRST
PLAY
PAUSE
REC
REPEAT
0-REC
JOG
0-PB
TV/VCR
0-STILL
MESECAM
NTSC358
NTSC443
EX
X
RST
SO
SI
SCK
REMOCON
VSS
VCC
NC
C-OUT
C-IN
C-START
TEST
REEL-S
RFSWP
END-S
TOP-S
KO 0
KO 1
KO 2
KO 3
KO 4
KO 5
TU/LINE (A)
TU/LINE (V)
AVCC
AVR+
AVR-
AVSS
VISS
SYNC
KI 3
KI 2
KI 1
KI 0
READY
REQ
S-DATA
S-CLK
NTSC:0
NTSC:5
R219 1M
CL201
KBR6.0MES
R204 4700
PST-5230
IC202
C204 0.01
C203 0.047
C201 100/10
C202 0.1
L201 47UH
R201 10K
R202 10K
R203 10K
R217 470
R216 470
B206 1SS133
D207 1SS133
D210 1SS133
B205 1SS133
D201 1SS133
D202 1SS133
D203 1SS133
D204 1SS133
D212 1SS133
RA204 10K X 5
R265 220K
2SA933S
Q201
R262 220K
R261 10K
Q202 2SA933S
R264 10K
R263
R266
1200×2
R209 1K
R208 1K
R207 1K
R206 10K
R205 10K
C205 0.1
RA203 10K X10
Q205 2SC1740S
R210 10M
REG GND
EVER+5V
13·14
1~8
VOLTAGE
:WAVEFORMS NO.
NO MARK:PB
( ) :EE (TAPE)
( ) :REC
{ } :STILL
< > :CUE/REV
SC301-A (CN301)
1 REG GND
2 REEL FG
3 EVER+5V
4 PH-A
5 CFG
6 CM (-)
7 CM (+)
8 LM (+)
9 LM (-)
10 MS 4
11 MS 3
12 MS 2
13 MS 1
14 KO 5
R267 180
TO J
RELAY-1 C.B
SC301-B (CN302)
SE206-A
1 END-S 4.8
2 TOP-S 4.8
3 GND 0
4 C-IN 0
5 C-ST 5
6 C-OUT 5
TO N
RELAY-5 C.B
SE206-B
CN304
1 C CONT
2 CTLP
3 Ø PB
4 JOG
5 PAUSE
6 TR RST
7 PAL/NTSC
8 DOC P
9 REG GND
10 PB C AT
TO E
AUTO TRACKING C.B
CN308
CN305
1 ACK
2 RF SWP
3 KO 4
4 KI 2
5 KI 1
6 KI 0
7 TRKG LED
8 TRKG A/M
9 EVER+5V
10 REG GND
TO E
AUTO TRACKING C.B
CN309
CN202
1 F/R AU
2 F LINE A (X)
3 F LINE A (Y)
4 F/R VI
5 F LINE V (X)
6 F LINE V (Y)
7 TRKG LED
8 TRKG A/M
9 REG +5V
10 REG GND
TO F
FRONT C.B
FS903
TP301
COMP SYNC
RFSWP
GND
ADJUSTMENT
TERMINAL
CN204
VCR/TV
F LI V (Y)
F LI V (X)
F LI A (Y)
F LI A (X)
F/R VI
F/R AU
LI/TU VI
LI/TU AU
REG GND
REG +12V
COMP SYNC
JOG VD
JOG 2
A MUTE
TO A MAIN C.B
(VIDEO SECTION)
BT401
CN205
UNREG +44V
D STILL
FLASH
RFSWP
MES/PAL
NT 4
NT 3
PLAY
EE
DOC P
REG GND
3FSC
REG GND
D REC
PB C AT
TO A MAIN C.B
(VIDEO SECTION)
VS402


D DIGITAL C.B
REG +5V
REG GND
9V
GND
Q50 2SA1162GR LPF
Q51 2SC2712GR BUFFER
Q55 ØRC114EK SWITCH
Q52 2SC2712GR
Q53 2SC2712GR
Q58 2SA1162GR LPF
Q59 2SC2712GR BUFFER
IC19 CXL5003M 1H ØELAY
Q54 2SA1162GR LPF
Q56 ØTC114EK MUTE SWITCH
Q57 2SC2712GR LPF
Q52. 53 MIX AMP
IC20 CXL5003M 1H ØELAY
Q1 2SC2712GR BUFFER
Q2 2SC2712GR GAIN
Q3 2SA1162GR AMP
Q4 2SC2712GR BUFFER
FL1 MZV-750
Q5 2SC2712GR BUFFER
Q16 ØTC144EK SWITCH
IC4 CHROMA ØECOØER
IC5 TC74HC4053AF
IC9 MB40776 Ø/A CONV.
IC10 Ø/A CONV. MB40778
IC11 VIØEO SWITCH
FL2 MXV-703
FL19
FL20
Q35 2SA1162GR BUFFER
Q32~34 2SC2712GR MIX AMP
Q31 2SA1162GR BUFFER
Q30 2SC2712GR BUFFER
TO A MAIN C.B (VIØEO SECTION) CN406
TO A MAIN C.B (VIØEO SECTION) BT591
CN1
ØIG Y
REG GNØ
TH V
ØIG C
REG +5V
ØIG +5V
ØIG GNØ
ØIG NT
ØIG PAL
JOG 2
BYPASS
NT 3
NT 4
MES/PAL
RF SWP
FLASH
Ø STILL
ØIG V
(N.C.)
CN2
9V
3FSC
GNØ

REG +5V
REG GND
9V
Q53 2SC2712GR BUFFER
Q58 2SA1162GR LPF
Q59 2SC2712GR BUFFER
Q63 ØTC114EK SWITCH
Q60. 61 2SC2712GR MIX AMP
Q64. 65 MUTE SWITCH
Q52. 53 MIX AMP
IC20 CXL5003M 1H ØELAY
Q62 2SA1162GR BUFFER
Q65 2SC2712GR
Q64 ØTC114EK
IC21 C7W04F BUFFER
A/Ø CONV. IC6 µPC661G
Q15 ØTC144EK ØISCHARGE SWITCH
IC21 TC7W04F BUFFER
Q4 2SC2712GR BUFFER
SELECTOR IC5 TC74HC4053AF
X1 14.31MHz
X2 17.73MHz
PTINT
NTINT
IC9 MB40776 Ø/A CONV.
IC10 Ø/A CONV. MB40778
Q20 2SA1162GR BUFFER
Q30 2SC2712GR BUFFER
FL19
FL20
FL10
FL15
FL14
FL11
FL18
Q43 ØTC144EK INVERTER
ØEC4
DIG +5V
DIG GNØ
CSYNC
W50
R50
IC7 TC74HCU04AF AFC ERROR AMP
VCO BUFFER
ØI 1T363
ØI 1SS184
L9 3.3UH (FLC32)
IC1 MB87813 MAIN PROCCESSOR
IC8 TC74HC00AF
IC12 TC74HC157F MOØE CONTROLLER
IC16 M74HC08FP MOØE CONTROLLER
IC13 HØ74HC221FP FLASH TIMER
IC14, 15 TC74HC02AF
IC17 TC4030BF
Q41 2SA1162GR Q42 ØTC144EK ØELAY
INVERTER IC8
OSCLATOR
BUFFE
BYPASS
JOG2
FLASH
ØSTL
VOLTAGE
I : INPUT MOØE
O : OUTPUT MOØE
( ) : NTSC MOØE
< > : PAL MOØE
( ) : スチル /FLASH MOØE
WITHOUT PARENTHESES
: PB OR REC/EE MOØE
VIDEO SIGN

Q63 ØTC114EK SWITCH
Q60. 61 2SC2712GR MIX AMP
Q64. 65 MUTE SWITCH
Q62 2SA1162GR BUFFER
Q65 2SC2712GR
Q64 ØTC114EK
Q15 ØTC144EK ØISCHARGE SWITCH
IC6 A/Ø CONV. μPC661G
IC21 C7W04F BUFFER
IC7 TC74HCU04AF AFC ERROR AMP
IC7 TC74HCU04AF
VCO — BUFFER
IC18 PST523Ø RESET
FL15
FL14
FL013
FL11
FL012
FL010
IC1 MB87813 MAIN PROCCESSOR
IC8 TC74HC00AF
IC12 TC74HC157F MODE CONTROLLER
IC16 M74HC08FP MODE CONTROLLER
IC13 HØ74HC221FP FLASH TIMER
IC14, 15 TC74HC02AF
IC17 TC4030BF
IC3 LH2464-10 MEMORY
IC2 LH2464-10 MEMORY
Q43 ØTC144EK INVERTER
Q41 2SA1162GR Q42 ØTC144EK ØELAY
FL18
FL17
FL16
BYPASS
W50
ØEC4
REG GND
ØIG GNØ
ØIG +5V
CSYNC
ENCK
JOG2
XCLR
YCLK
RESET
VOLTAGE
I: INPUT MODE
O: OUTPUT MODE
( ): NTSC MODE
< >: PAL MODE
( ): スチル/FLASH MODE
WITHOUT PARENTHESES :PB OR REC/EE MODE
VIDEO SIGNAL
: ØIGITAL Y SIGNAL
: ØIGITAL CHROMA SIGNAL
: ØIGITAL VIDEO SIGNAL
: TH V SIGNAL
: ØA Y SIGNAL
: ØA C SIGNAL
: R-Y (V) SIGNAL
: B-Y (U) SIGNAL

SCHEMATIC DIAGRAM – 4



IC903
SBX1610-52
REMOTE SENSOR

R914 33K
R915 33K
R916 33K
R917 33K
EVER +5V
GNĐ

R918 100K
R919 10K
R920 10K
R921 10K
R923 10K
R924 10K
R925 10K
R926 4.7K

IC902 BR93C46
E² ROM
CS
SK
ĐI
ĐO
VCC
NC
ORG
GNĐ

Đ909~915
1SS133×7
Đ909
Đ910
Đ911
Đ912
Đ913
Đ914
Đ915
Đ917
1SS133

SW903
STOP
SW904
F.FWĐ
SW905
REW
SW906
PLAY
SW907
PAUSE/STILL
SW908
RECORĐ
SW910
QTR
SW911
TIMER REC
SW912
COUNTER RESET
SW913
MEMORY
SW914
INPUT
SW915
CLOCK/ COUNTER
SW916
CHECK/PRGM
SW917
NEXT
SW918
CLEAR
SW919
TIME SET
SW920
CH UP
SW921
CH ĐOWN

Đ901
Đ902
Đ903
Đ904
Đ905
Đ906
Đ907
Đ908
Đ901~908
1SS133×8

IC901 UPĐ75212ACW-246
TIMER MICRO PROCESSOR

R903 68K
C908 33/25
Đ923 HZ9C1L

R906 220
R907 220
Đ926
Đ927
NTSC3.58
NTSC4.43

GNĐ
REG +5V

G KEY

J901 JPJ3844-01
-2 VIĐEO IN
-1 AUĐIO IN

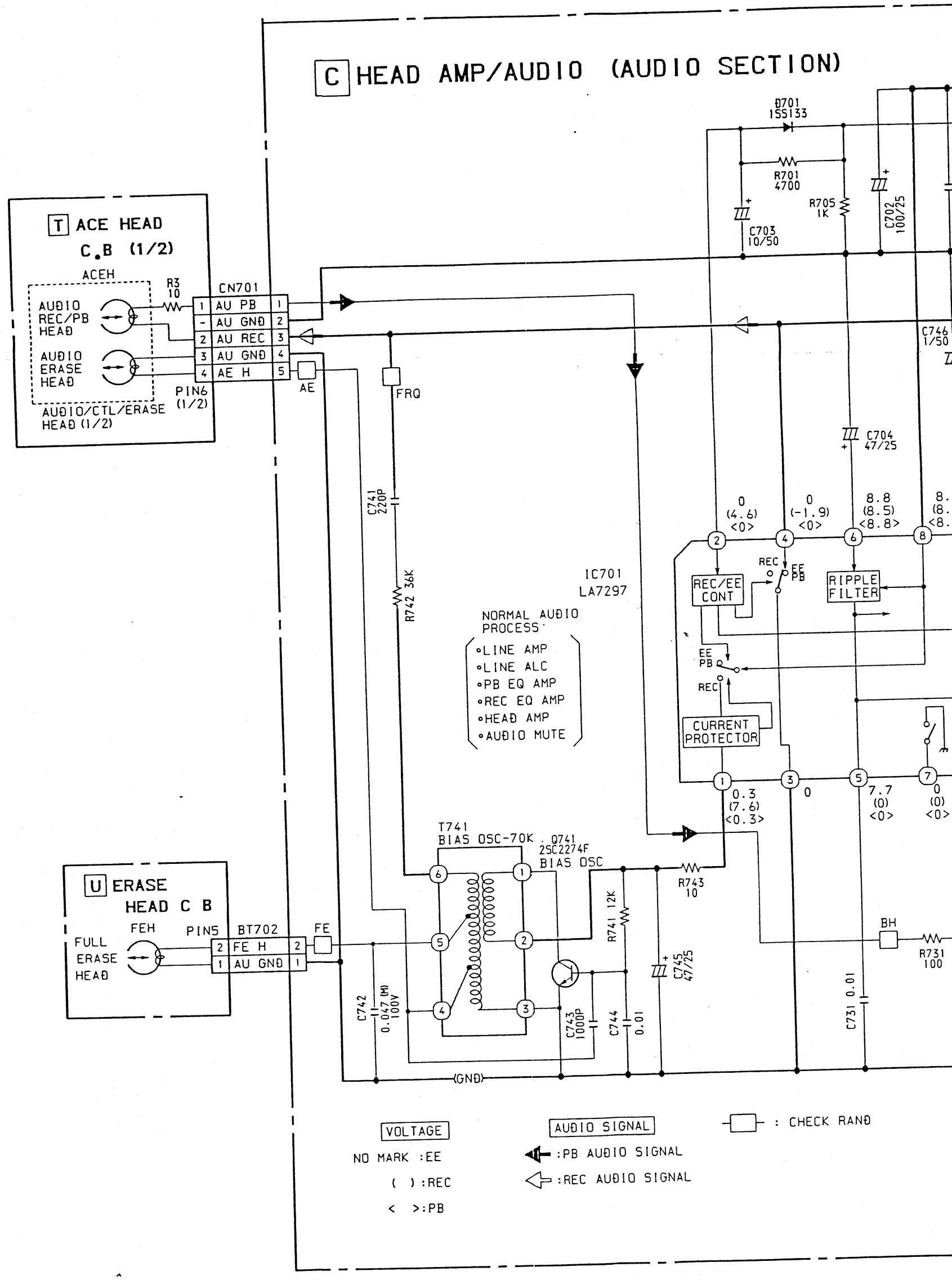
FS903
1 F/R AUĐIO
2 F LINE A (X)
3 F LINE A (Y)
4 F/R VIĐEO
5 F LINE V (X)
6 F LINE V (Y)
7 TRKG LEĐ
8 TRKG A/M
9 REG +5V
10 REG GNĐ
TO B SERVO/SYS.CON C.B
CN202

FL901 9-LT-20GK
ĐISPLAY

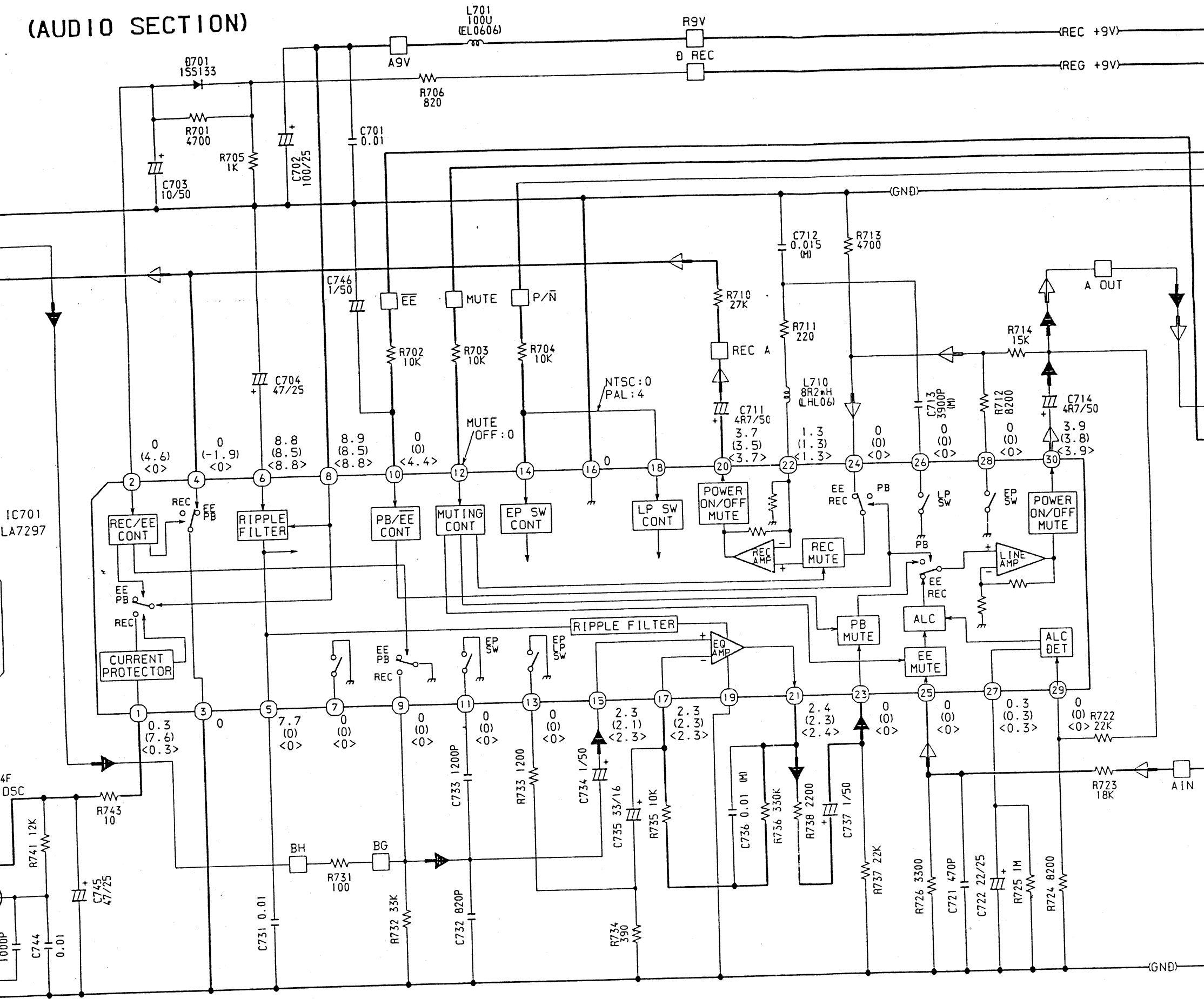
REC
TIMER
NEXT
ON OFF
AM
PM
SU MO TU WE TH FR SA
SIMUL
LINE
SP LP EP
PAL
MESECAM
CH
EĐIT
MEMO
VCR
QTR
ĐEW

FR-21

EVER +5V
GNÐ
R918 100K
R919 10K
R920 10K
R921 10K
IC902 BR93C46
E² ROM
Ð909~915
1SS133×7
Ð909
Ð910
Ð911
Ð912
Ð913
Ð914
Ð915
Ð917
1SS133
SW903
STOP
Ð901
SW904
F.FWÐ
SW905
REW
SW906
PLAY
SW907
PAUSE/STILL
Ð902
SW908
RECORÐ
SW910
QTR
SW911
TIMER REC
Ð903
SW912
COUNTER RESET
SW913
MEMORY
SW914
INPUT
SW915
CLOCK/
COUNTER
Ð904
SW916
CHECK/PRGM
SW917
NEXT
SW918
CLEAR
SW919
TIME SET
Ð905
SW920
CH UP
SW921
CH ÐOWN
Ð906
Ð907
Ð908
Ð901~908
1SS133×8
GNÐ
REG +5V
-23.4
32
34
35
2G
1G
VCR
QTR
ÐEW
LINE
SP LP EP
PAL
MESECAM
CH
FL901 9-LT-20GK
ÐISPLAY
J901 JPJ3844-01
-2 VIÐEO IN
-1 AUÐIO IN
FS903
1 F/R AUÐIO
2 F LINE A (X)
3 F LINE A (Y)
4 F/R VIÐEO
5 F LINE V (X)
6 F LINE V (Y)
7 TRKG LEÐ
8 TRKG A/M
9 REG +5V
10 REG GNÐ
TO B SERVO/SYS. CON C.B
CN202
FR-21
CN904
CN905
H G F A KM3 KM2 KM1 KM0 REG +5V REG GNÐ
FR-22
G KEY SWITCH C.B
Ð918
Ð919
Ð920
Ð921
Ð918~921
1SS133×4
Ð922
POWER
Ð922
SLZ981E-02
R922 220
SW901
POWER
SW902
EJECT
SW922
1
SW923
10
SW924
AUTO/MANUAL
SW925
TU+
SW926
TU-
SW927
BANÐ
(SW933)
TV/VCR
SW929
PRESET
SW930
SYSTEM


C HEAD AMP/AUDIO (AUDIO SECTION)
T ACE HEAD
C.B (1/2)
ACEH
AUDIO REC/PB HEAD
AUDIO ERASE HEAD
AUDIO/CTL/ERASE HEAD (1/2)
R3 10
CN701
1 AU PB 1
- AU GND 2
2 AU REC 3
3 AU GND 4
4 AE H 5
PIN6 (1/2)
AE
FRQ
D701 1SS133
R701 4700
R705 1K
C703 10/50
C702 100/25
C746 1/50
C704 47/25
C741 220P
R742 36K
IC701 LA7297
NORMAL AUDIO PROCESS
•LINE AMP
•LINE ALC
•PB EQ AMP
•REC EQ AMP
•HEAD AMP
•AUDIO MUTE
REC/EE CONT
REC EE PB
RIPPLE FILTER
EE PB
REC
CURRENT PROTECTOR
0 (4.6) <0>
0 (-1.9) <0>
8.8 (8.5) <8.8>
0.3 (7.6) <0.3>
0
7.7 (0) <0>
0 (0) <0>
T741 BIAS OSC-70K
Q741 2SC2274F BIAS OSC
R743 10
R741 12K
C745 47/25
C731 0.01
BH
R731 100
U ERASE HEAD C B
FEH
PIN5
BT702
FULL ERASE HEAD
2 FE H 2
1 AU GND 1
FE
C742 0.047 (M) 100V
C743 1000P
C744 0.01
(GND)
VOLTAGE
NO MARK :EE
( ) :REC
< >:PB
AUDIO SIGNAL
:PB AUDIO SIGNAL
:REC AUDIO SIGNAL
: CHECK RAND

(AUDIO SECTION)

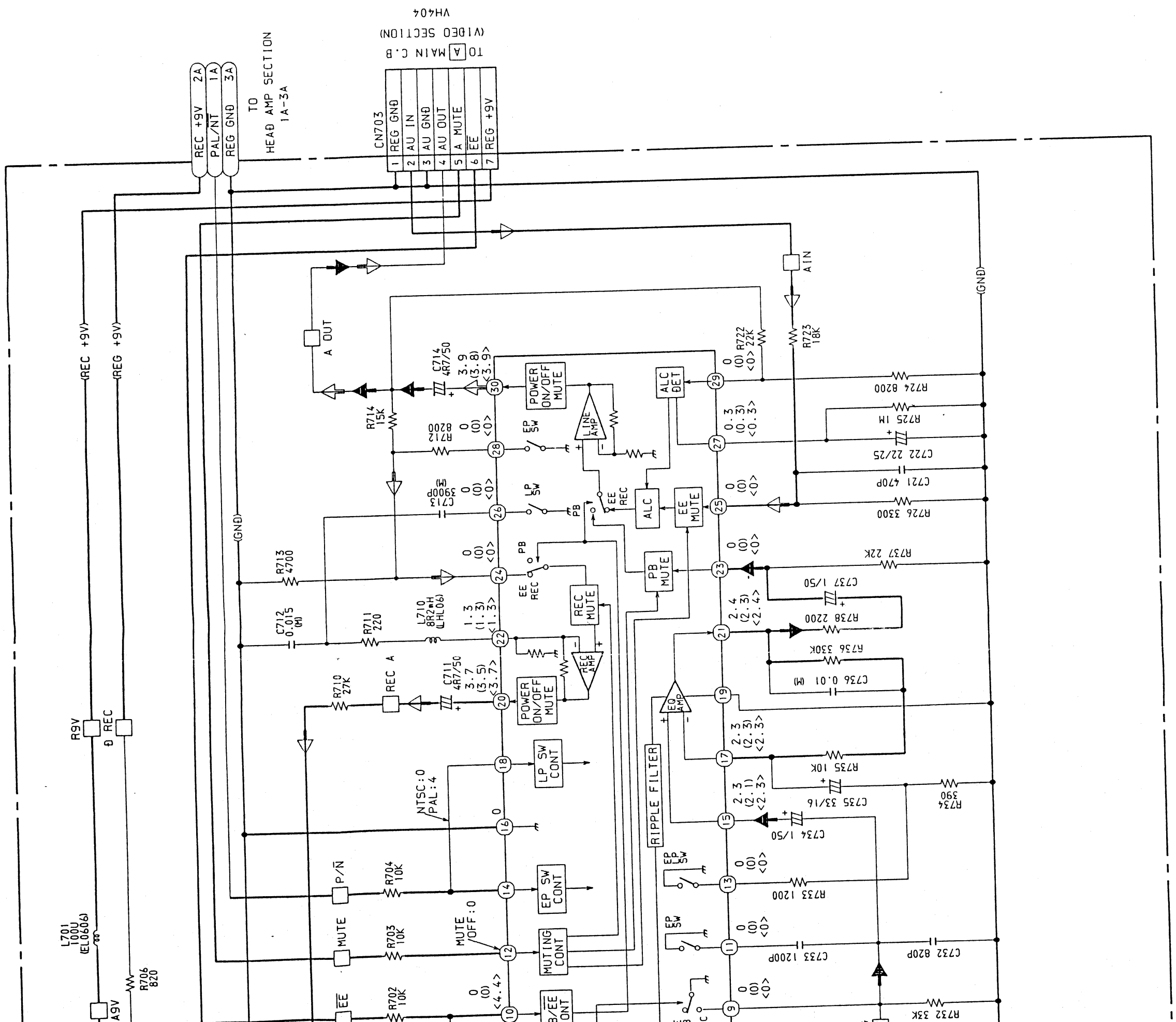


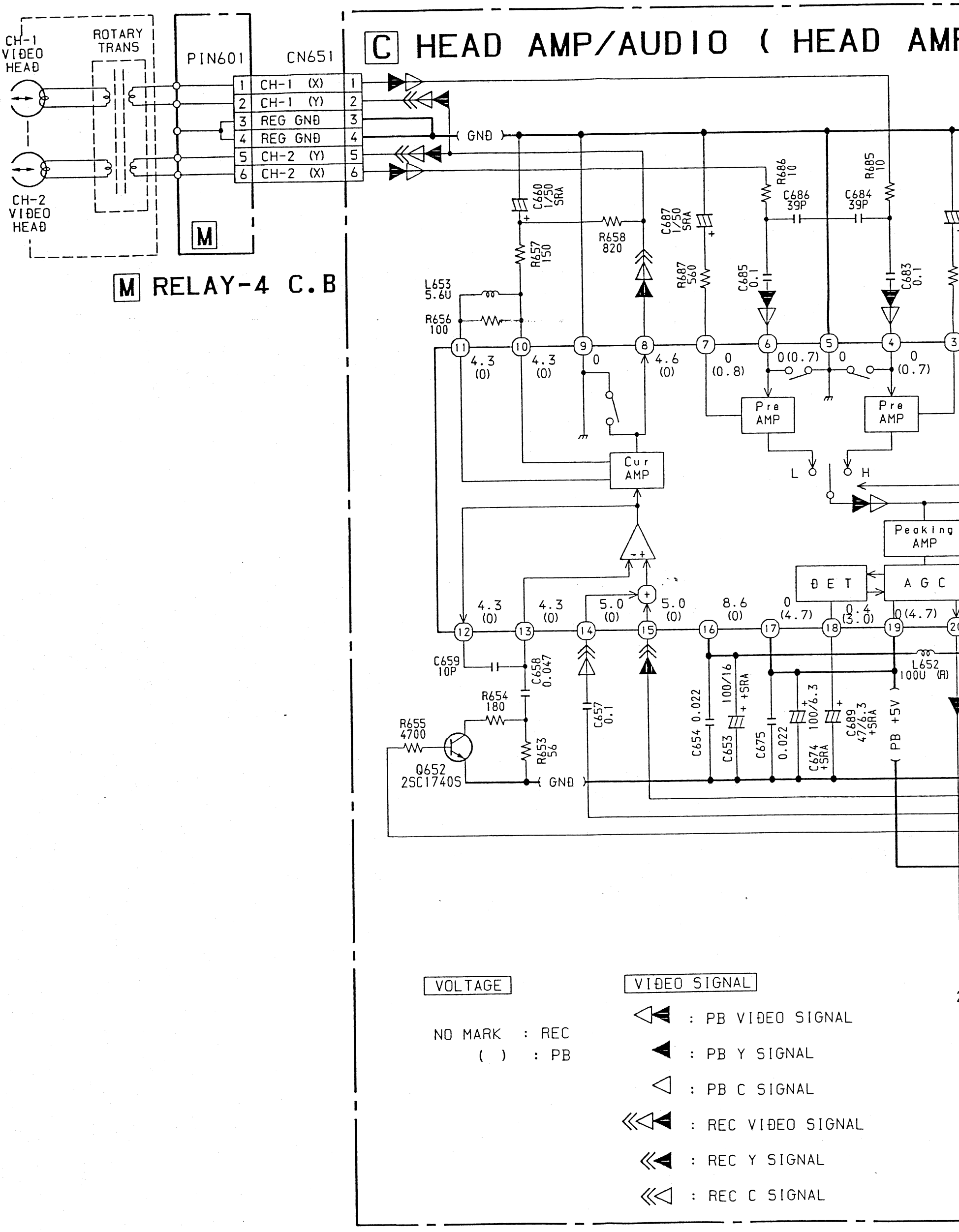
: CHECK RANĐ

IO SIGNAL

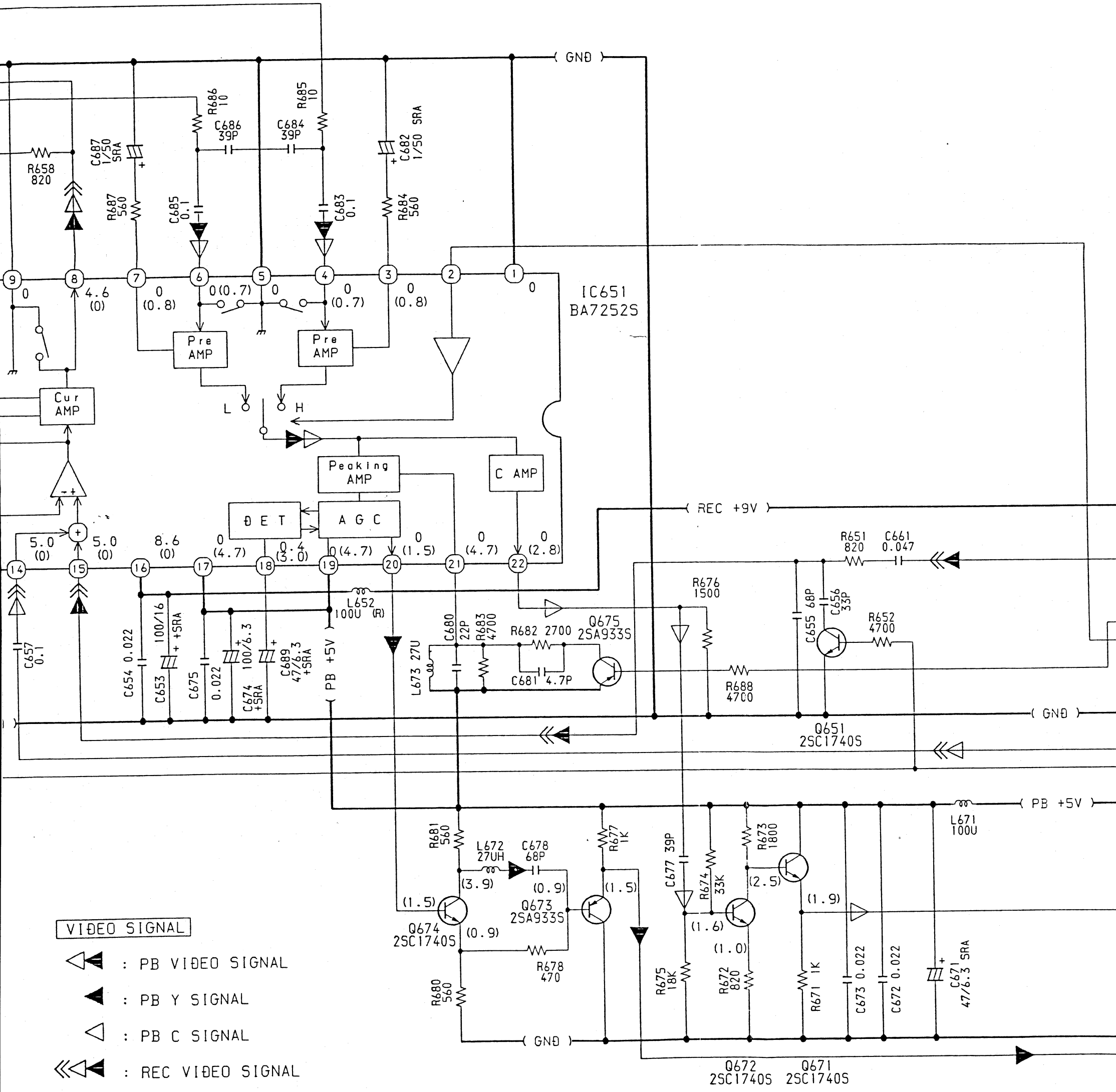
AUĐIO SIGNAL

EC AUĐIO SIGNAL


CN703
1 REG GND
2 AU IN
3 AU GND
4 AU OUT
5 A MUTE
6 EE
7 REG +9V
TO A MAIN C.B
(VIDEO SECTION)
VH404
TO
HEAD AMP SECTION
1A-3A
REC +9V 2A
PAL/NT 1A
REG GND 3A
REC +9V
REG +9V
A OUT
A IN
(GND)
C714 4R7/50
3.9 (3.8) <3.9>
POWER ON/OFF MUTE
R714 15K
R712 8200
0 (0) <0>
EP SW
LINE AMP
ALC DET
0 (0) R722 22K <0>
R723 18K
R724 8200
R725 1M
C722 22/25
C721 470P
R726 3300
0 (0) <0>
C713 3900P
LP SW
PB
EE REC
ALC
EE MUTE
R713 4700
C712 0.015 (M)
R711 220
L710 8R2mH (LHL06)
1.3 (1.3) <1.3>
REC MUTE
PB MUTE
R737 22K
C737 1/50
R738 2200
R736 330K
C736 0.01 (M)
2.4 (2.3) <2.4>
REC A
C711 4R7/50
3.7 (3.5) <3.7>
R710 27K
REC AMP
EQ AMP
2.3 (2.3) <2.3>
R735 10K
C735 33/16
R734 390
C734 1/50
RIPPLE FILTER
LP SW CONT
NTSC:0 PAL:4
EP SW CONT
MUTING CONT
P/N
MUTE
EE
R704 10K
R703 10K
R702 10K
MUTE OFF:0
0 (0) <4.4>
EP LP SW
EP SW
R733 1200
C733 1200P
C732 820P
R732 33K
R9V
B REC
A9V
L701 100U (EL0606)
R706 820


CH-1 VIDEO HEAD
ROTARY TRANS
CH-2 VIDEO HEAD
PIN601
CN651
1 CH-1 (X) 1
2 CH-1 (Y) 2
3 REG GND 3
4 REG GND 4
5 CH-2 (Y) 5
6 CH-2 (X) 6
M
M RELAY-4 C.B
C HEAD AMP/AUDIO (HEAD AMP
GND
C660 1/50 SRA
R657 150
R658 820
C687 1/50 SRA
R687 560
R686 10
C686 39P
C685 0.1
R685 10
C684 39P
C683 0.1
L653 5.6U
R656 100
11 4.3 (0)
10 4.3 (0)
9 0
8 4.6 (0)
7 0 (0.8)
6 0 (0.7)
5 0
4 0 (0.7)
Pre AMP
Pre AMP
Cur AMP
L
H
Peaking AMP
DET
AGC
12 4.3 (0)
13 4.3 (0)
14 5.0 (0)
15 5.0 (0)
16 8.6 (0)
17 0 (4.7)
18 0.4 (3.0)
19 0 (4.7)
C659 10P
C658 0.047
C657 0.1
L652 100U (R)
C654 0.022
C653 100/16 + +SRA
C675 0.022
C674 100/6.3 +SRA
C689 47/6.3 +SRA
PB +5V
R654 180
R655 4700
R653 56
Q652 2SC1740S
GND
VOLTAGE
NO MARK : REC
( ) : PB
VIDEO SIGNAL
: PB VIDEO SIGNAL
: PB Y SIGNAL
: PB C SIGNAL
: REC VIDEO SIGNAL
: REC Y SIGNAL
: REC C SIGNAL

P/AUDIO (HEAD AMP SECTION) C.B



VIÐEO SIGNAL

: PB VIÐEO SIGNAL

: PB Y SIGNAL

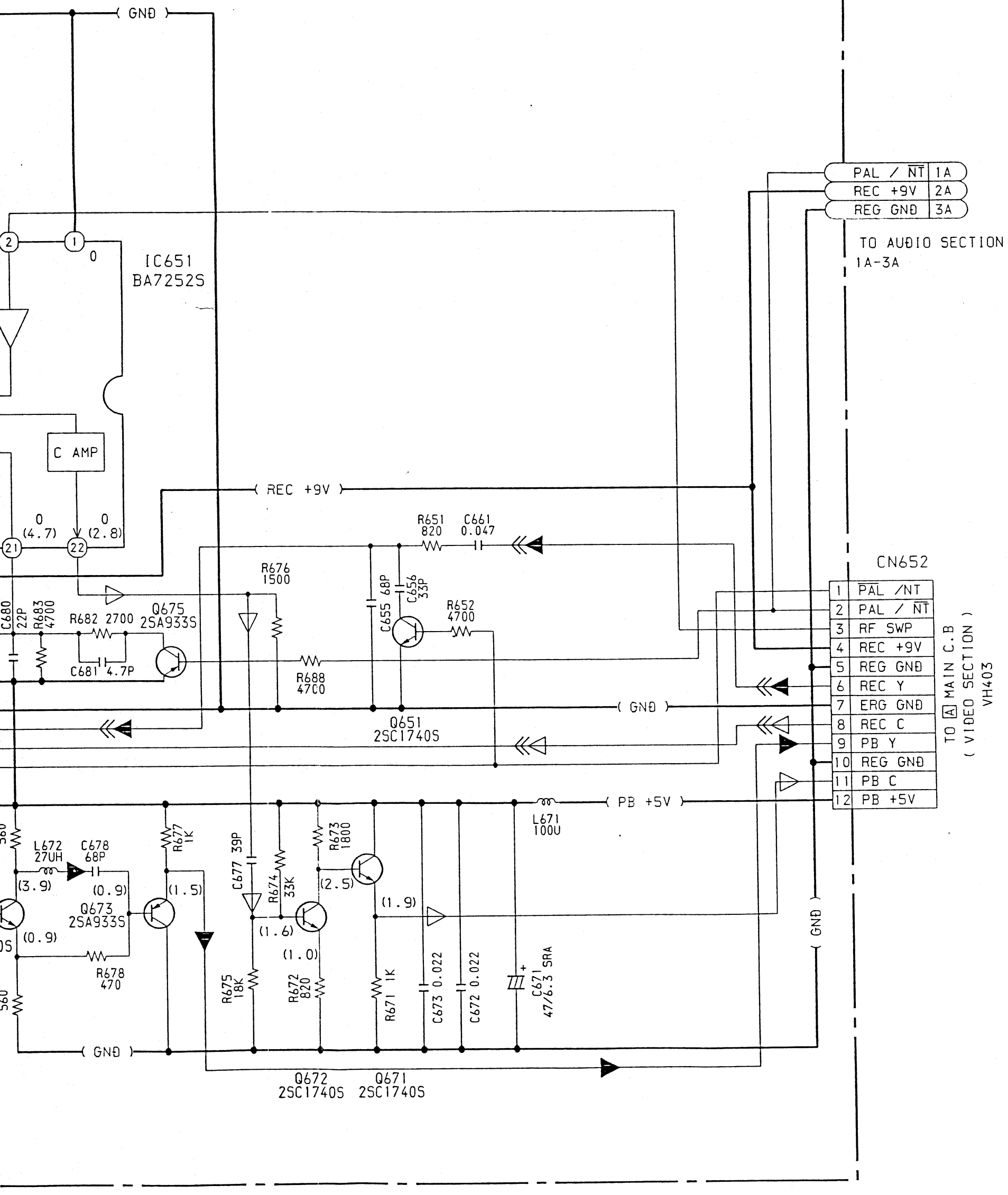
: PB C SIGNAL

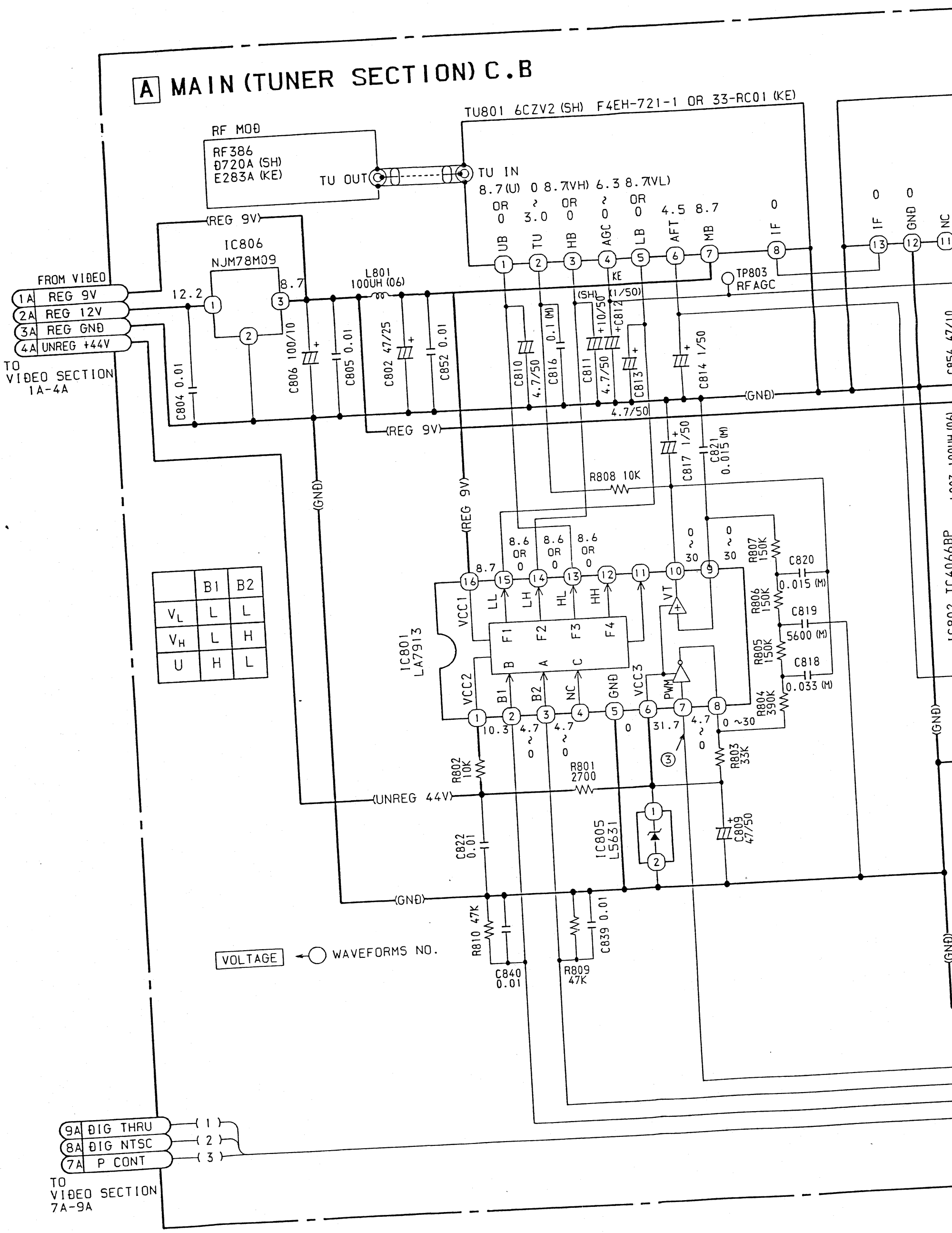
: REC VIÐEO SIGNAL

: REC Y SIGNAL

: REC C SIGNAL

SECTION) C.B


GND
IC651
BA7252S
C AMP
REC +9V
R651 820
C661 0.047
R676 1500
C655 68P
C656 33P
R652 4700
Q675 2SA933S
R682 2700
C681 4.7P
R683 4700
C680 22P
R688 470
Q651 2SC1740S
GND
PB +5V
L671 100U
L672 27UH
C678 68P
R677 1K
C677 39P
R674 33K
R673 1800
R675 18K
R672 820
R671 1K
C673 0.022
C672 0.022
C671 47/6.3 SRA
Q673 2SA933S
R678 470
Q672 2SC1740S
Q671 2SC1740S
PAL / NT 1A
REC +9V 2A
REG GND 3A
TO AUDIO SECTION 1A-3A
CN652
1 PAL /NT
2 PAL / NT
3 RF SWP
4 REC +9V
5 REG GND
6 REC Y
7 ERG GND
8 REC C
9 PB Y
10 REG GND
11 PB C
12 PB +5V
TO A MAIN C.B (VIDEO SECTION) VH403



	B1	B2
V_L	L	L
V_H	L	H
U	H	L

-721-1 OR 33-RC01 (KE)

VIF801 RFIVC. 01 (SH) 02M-03 (KH)

IC804 MM1021

IC802 TC4066BP

IC803 BA10393N

TP803 RFAGC

TP801

TP804 AFT

(GNĐ)

(REG 9V)

RF IVC. 01 (SH) 02M-03 (KH)

IC804 MM1021

1/32
AND
AMP
VCC
位相比较
SYNC SEP
VCO
COMP.

(GND)
(REG 9V)

TP801

L802 100UH (06)
L805 100UH (06)
L808 100UH (06)

R812 10K
R811 4700
R847 3300
C849 0.022
C848 0.022
C807 100/10
C843 0.01
C853 0.01
C828 47/10
C829 10/50
R831 1000
R833 1K
R846 3300
R850 330K
R813 27K 47K (KE)

Q803 2SA933S
Q802 ĐTC124ES
Q804 2SC1740S
Q805 ĐTC143ES

R836 1200
CF801 CSB 500ES
R837 1000
C832 1000P
C833 330P
C834 0.47/50
R835 15K
C835 1/50
C836 180P
R838 220
R839 220K
R843 18K
R840 75K
C837 0.47/50
R842 10K
R841 10K

TU VIĐEO 5A
TU AUĐIO 6A
TO VIĐEO SECTION 5A, 6A
TP802
TU AUĐIO

R828 47K

R826 100K
R822 100K (SH) 68K (KE)
R819 68K (SH) 82K (KE)
R818 56K
R817 10K
R816 10K
C845 0.01
C825 0.01
C824 0.01
C826 0.01
C844 0.01
C841 0.01

TP804 AFT

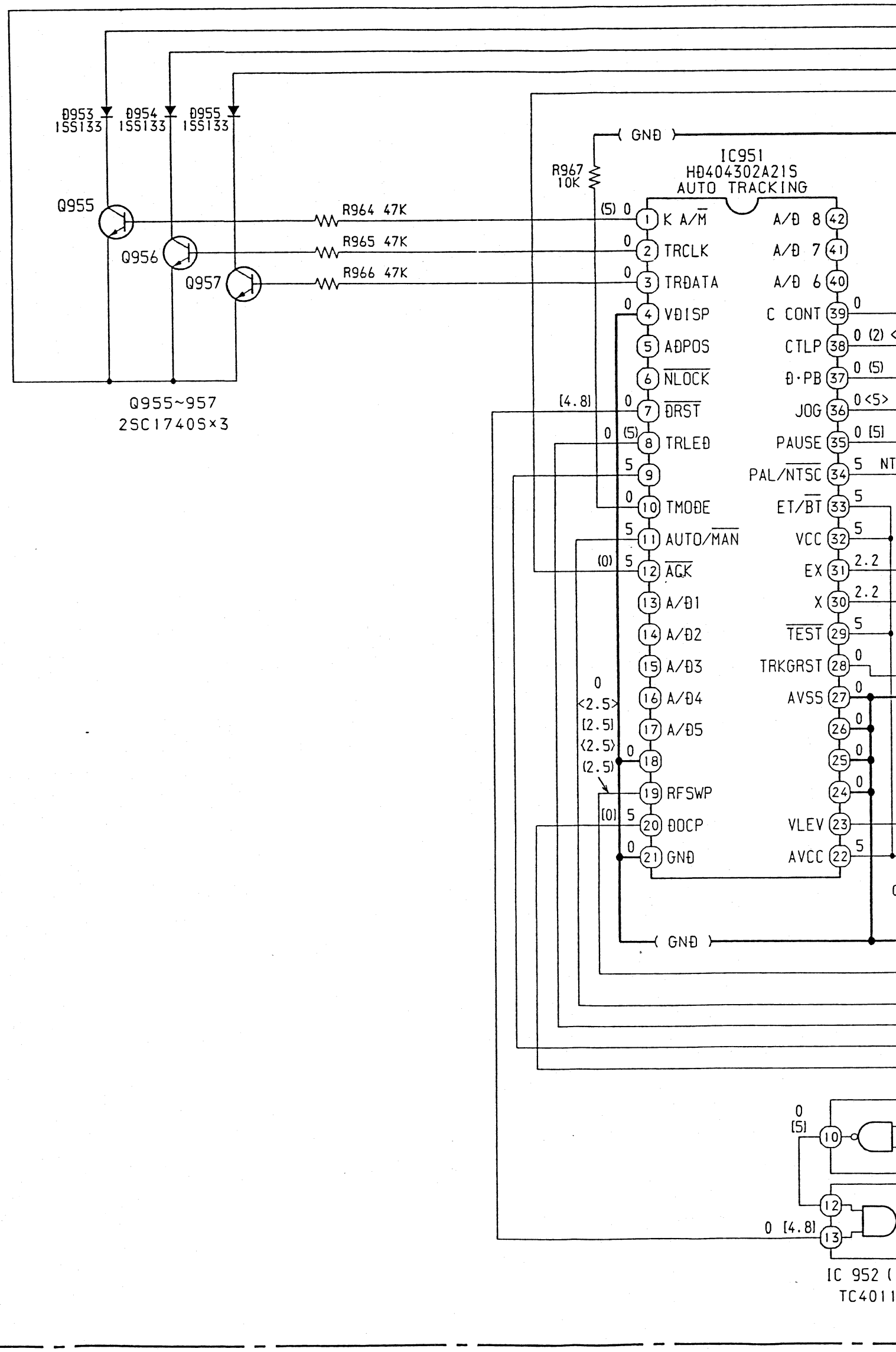
Đ803 1SS133
Đ801 1SS133

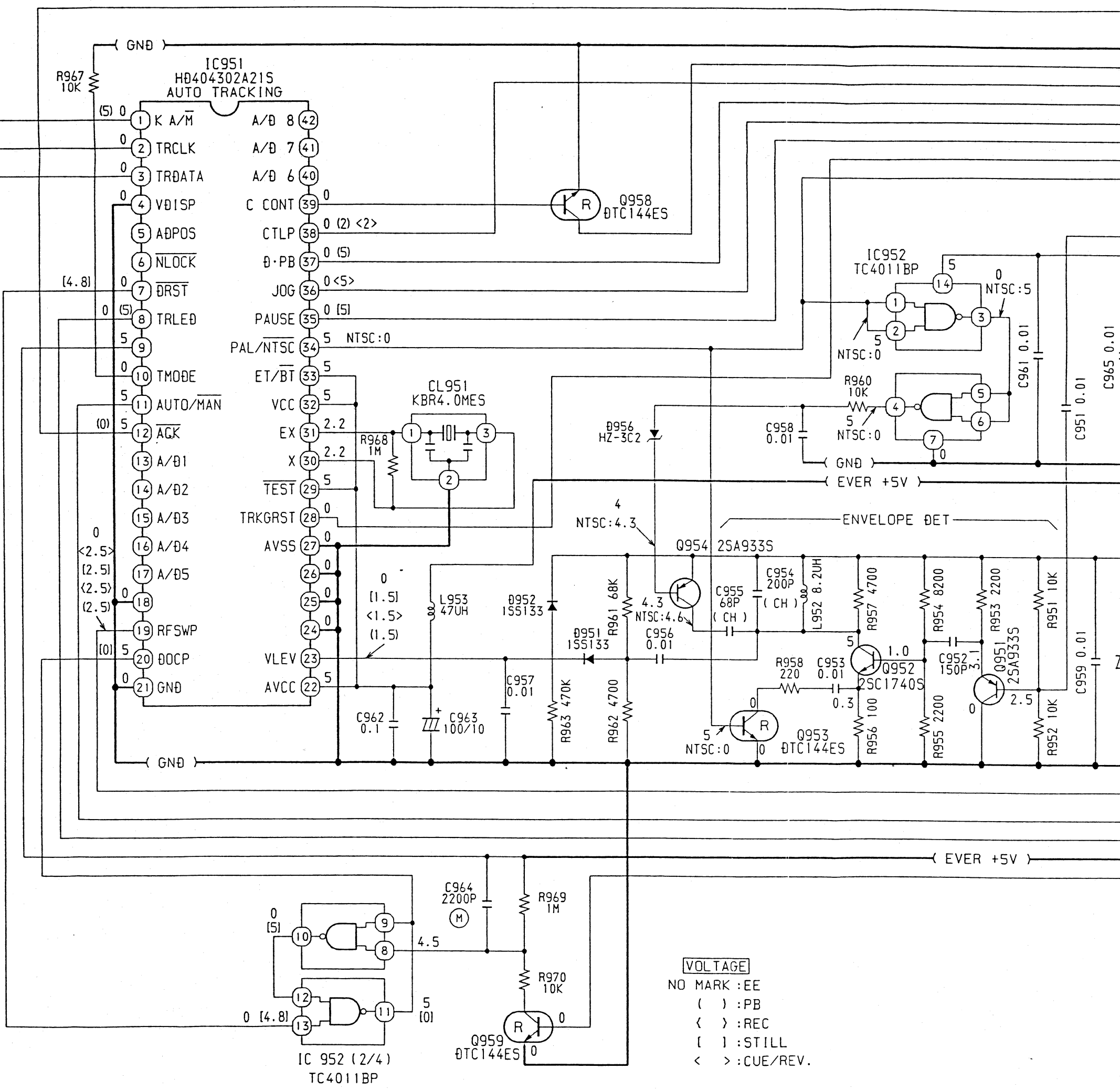
FV-801

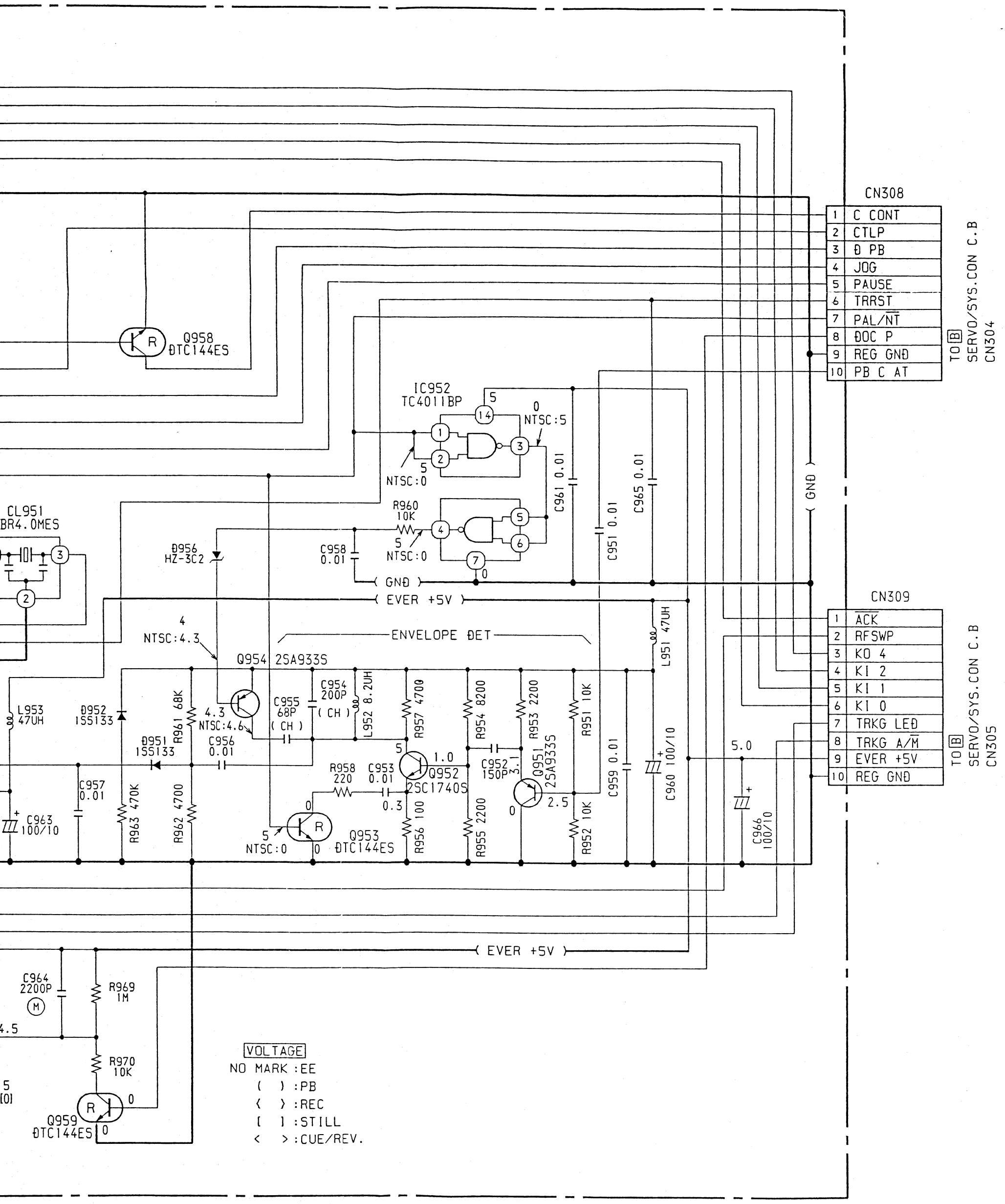
1	SYNC ĐET
2	S MUTE
3	AFT H
4	AFT L
5	PPO
6	BAND 2
7	BAND 1
8	AFT Đ
9	K MUTE
10	ĐIG PAL
11	ĐIG NT
12	REG GND
13	P CONT

TO F FRONT C.B CN902

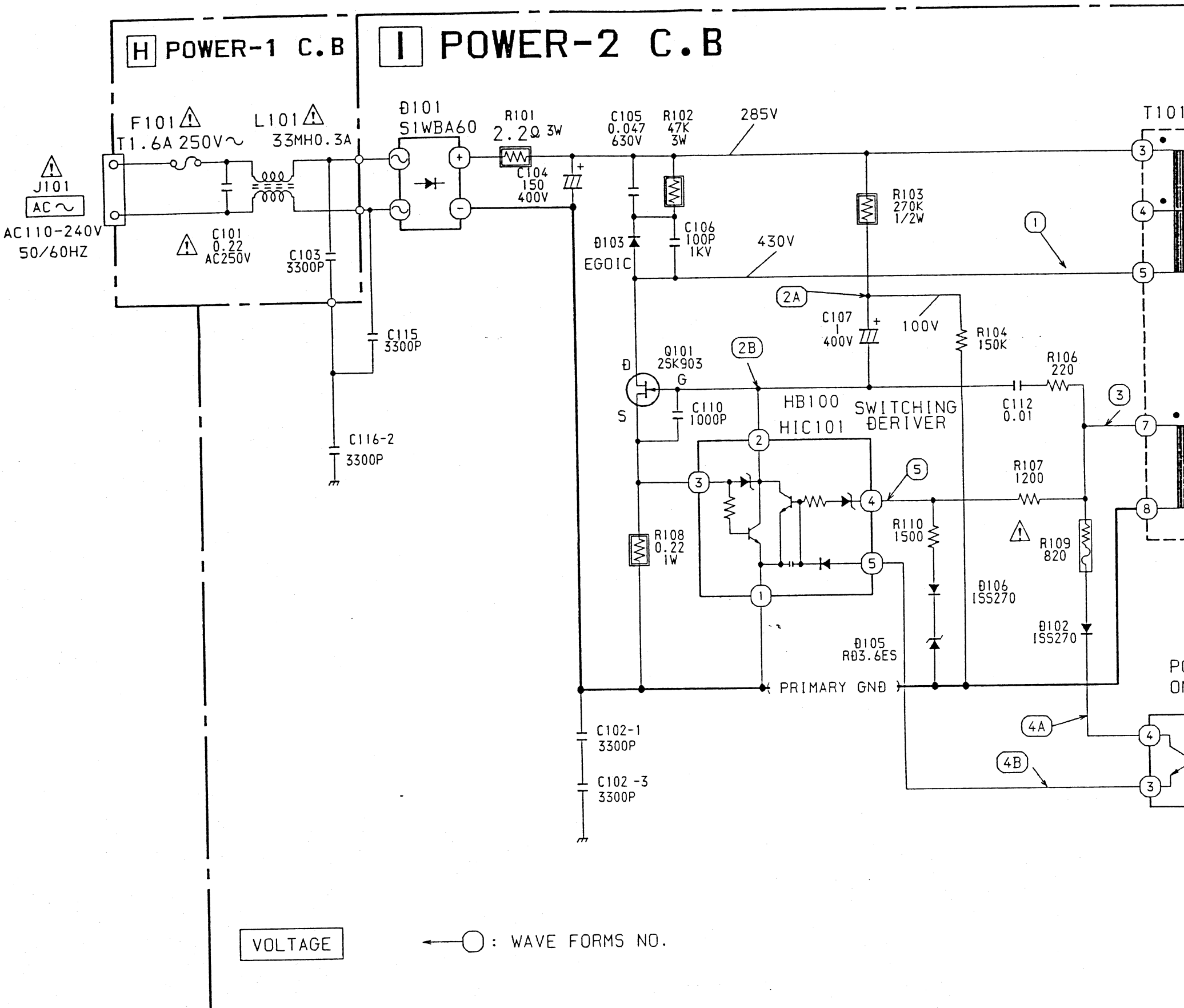
E AUTO TRACKING C.B

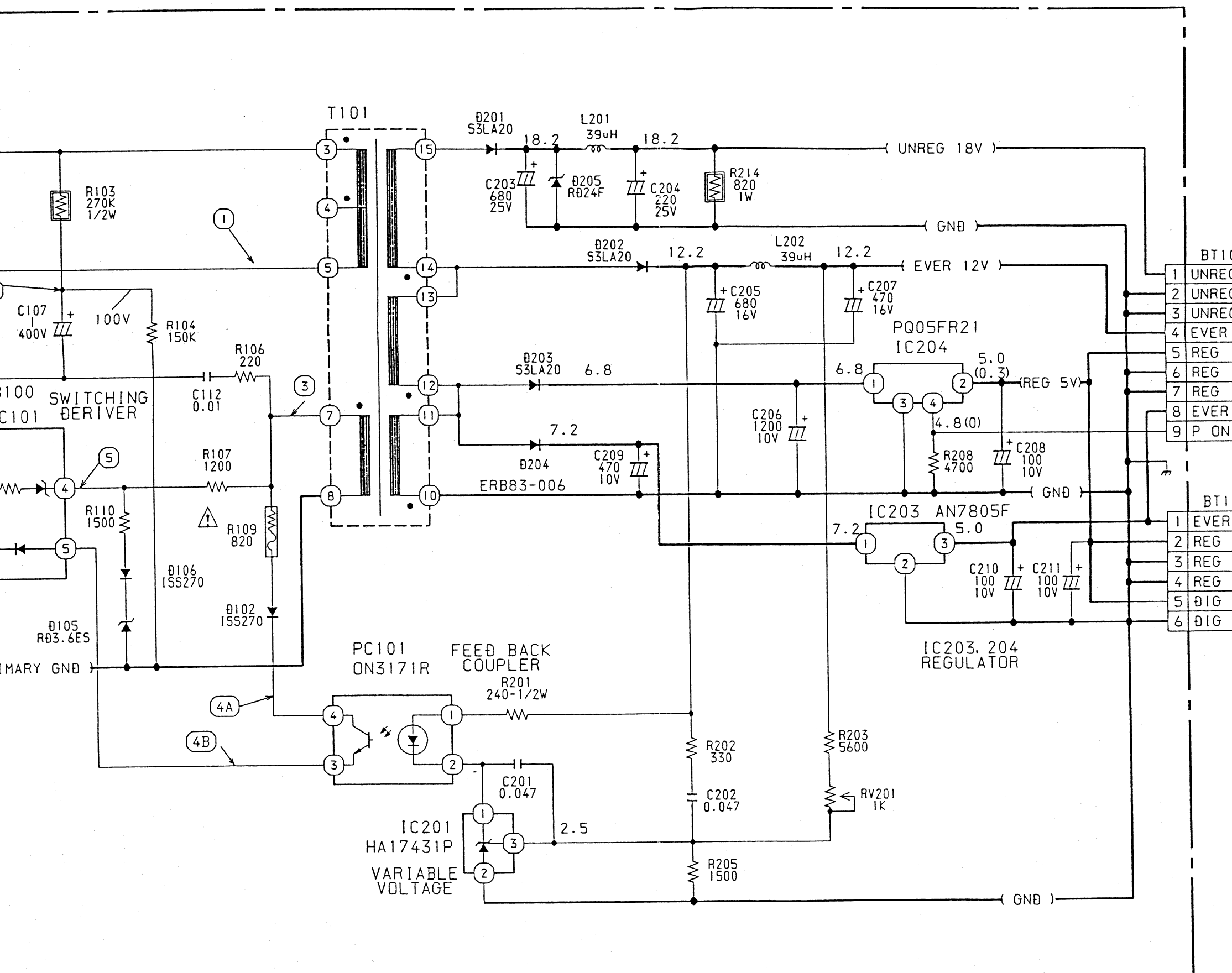


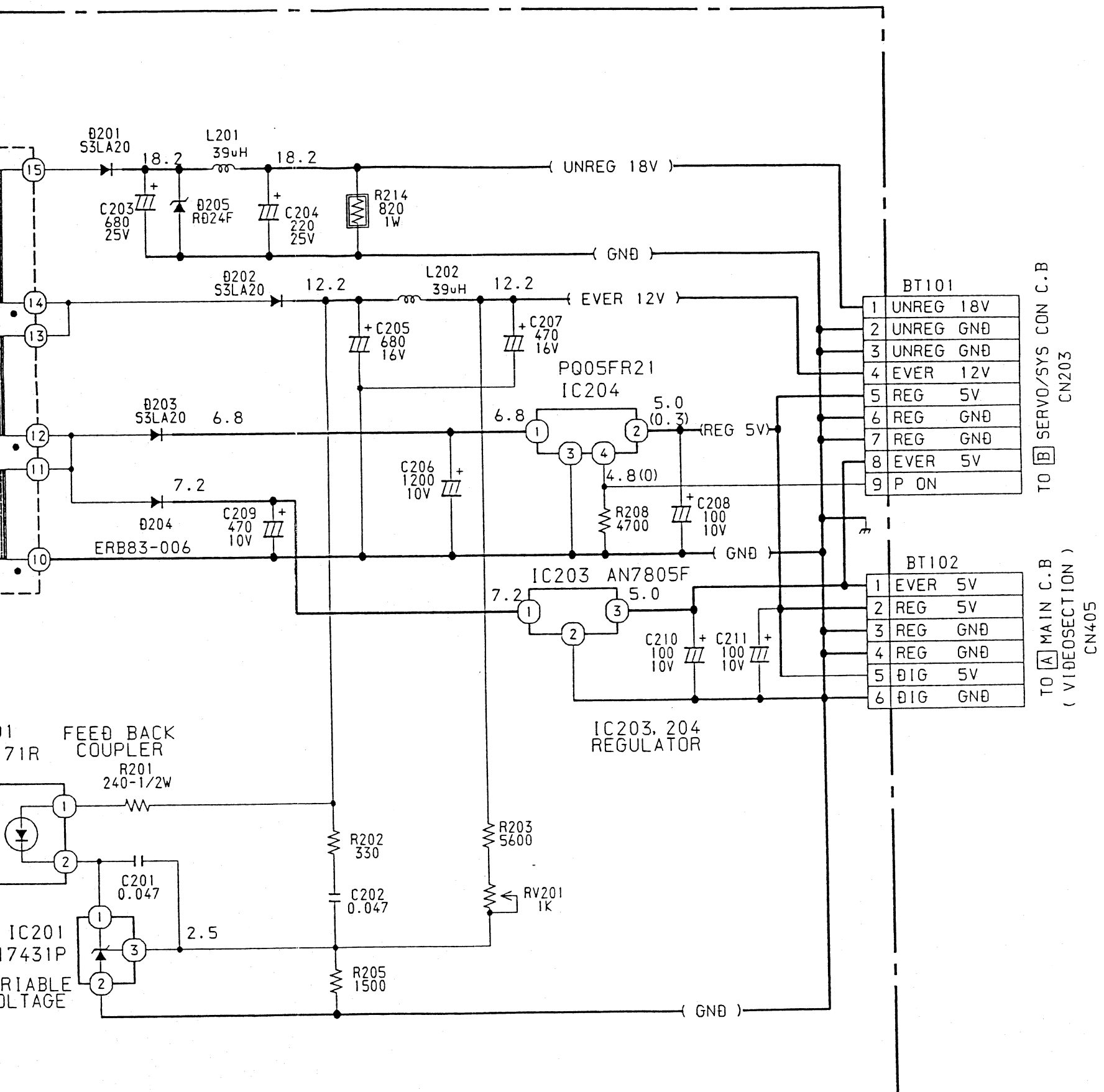

GND
IC951
HD404302A21S
AUTO TRACKING
R967
10K
(5) 0
1 K A/M
0
2 TRCLK
0
3 TRDATA
0
4 VDISP
5 ADPOS
6 NLOCK
[4.8] 0
7 DRST
0 (5)
8 TRLED
5
9
0
10 TMODE
5
11 AUTO/MAN
(0) 5
12 ACK
13 A/D1
14 A/D2
15 A/D3
0
<2.5>
[2.5]
16 A/D4
<2.5>
(2.5)
17 A/D5
0
18
(2.5)
19 RFSWP
[0] 5
20 DOCP
0
21 GND
A/D 8 42
A/D 7 41
A/D 6 40
C CONT 39 0
CTLP 38 0 (2) <2>
D·PB 37 0 (5)
JOG 36 0 <5>
PAUSE 35 0 [5]
PAL/NTSC 34 5 NTSC:0
ET/BT 33 5
VCC 32 5
EX 31 2.2
X 30 2.2
TEST 29 5
TRKGRST 28 0
AVSS 27 0
26 0
25 0
24 0
VLEV 23
AVCC 22 5
CL951
KBR4.0MES
R968
1M
C962
0.1
C963
100/10
C957
0.01
L953
47UH
0
[1.5]
<1.5>
(1.5)
D952
1SS133
D951
1SS133
R961 68K
R963 470K
R962 4700
C956
0.01
Q958
DTC144ES
R
D956
HZ-3C2
4
NTSC:4.3
Q954 2SA933S
4.3
NTSC:4.6
C955
68P
(CH)
C954
200P
(CH)
L952 8.2UH
R957 4700
5
1.0
Q952
2SC1740S
R958
220
C953
0.01
0.3
R956 100
0
R
5
NTSC:0
0
Q953
DTC144ES
R954 8200
R955 2200
C952
150P
3.1
Q951
2SA933S
R953 2200
0
2.5
R951 10K
R952 10K
C959 0.01
ENVELOPE DET
IC952
TC4011BP
5
14
0
NTSC:5
1
2
3
5
NTSC:0
C961 0.01
R960
10K
4
5
6
5
NTSC:0
7
0
C958
0.01
GND
EVER +5V
C951 0.01
C965 0.01
EVER +5V
C964
2200P
M
R969
1M
R970
10K
Q959
DTC144ES
R
0
0
[5]
10
9
8
4.5
12
13
11
0 [4.8]
5
[0]
IC 952 (2/4)
TC4011BP
VOLTAGE
NO MARK : EE
( ) : PB
{ } : REC
[ ] : STILL
< > : CUE/REV.


CN308
1 C CONT
2 CTLP
3 Ø PB
4 JOG
5 PAUSE
6 TRRST
7 PAL/NT
8 ØOC P
9 REG GNØ
10 PB C AT
TO B SERVO/SYS.CON C.B CN304
CN309
1 ACK
2 RFSWP
3 KO 4
4 KI 2
5 KI 1
6 KI 0
7 TRKG LEØ
8 TRKG A/M
9 EVER +5V
10 REG GNØ
TO B SERVO/SYS.CON C.B CN305
IC952 TC4011BP
Q958 ØTC144ES
Q954 2SA933S
Q952 2SC1740S
Q951 2SA933S
Q953 ØTC144ES
Q959 ØTC144ES
CL951 BR4.0MES
Ø956 HZ-3C2
Ø952 1SS133
Ø951 1SS133
L951 47UH
L952 8.2UH
L953 47UH
ENVELOPE ØET
GNØ
EVER +5V
VOLTAGE
NO MARK :EE
( ) :PB
〈 〉 :REC
[ ] :STILL
< > :CUE/REV.

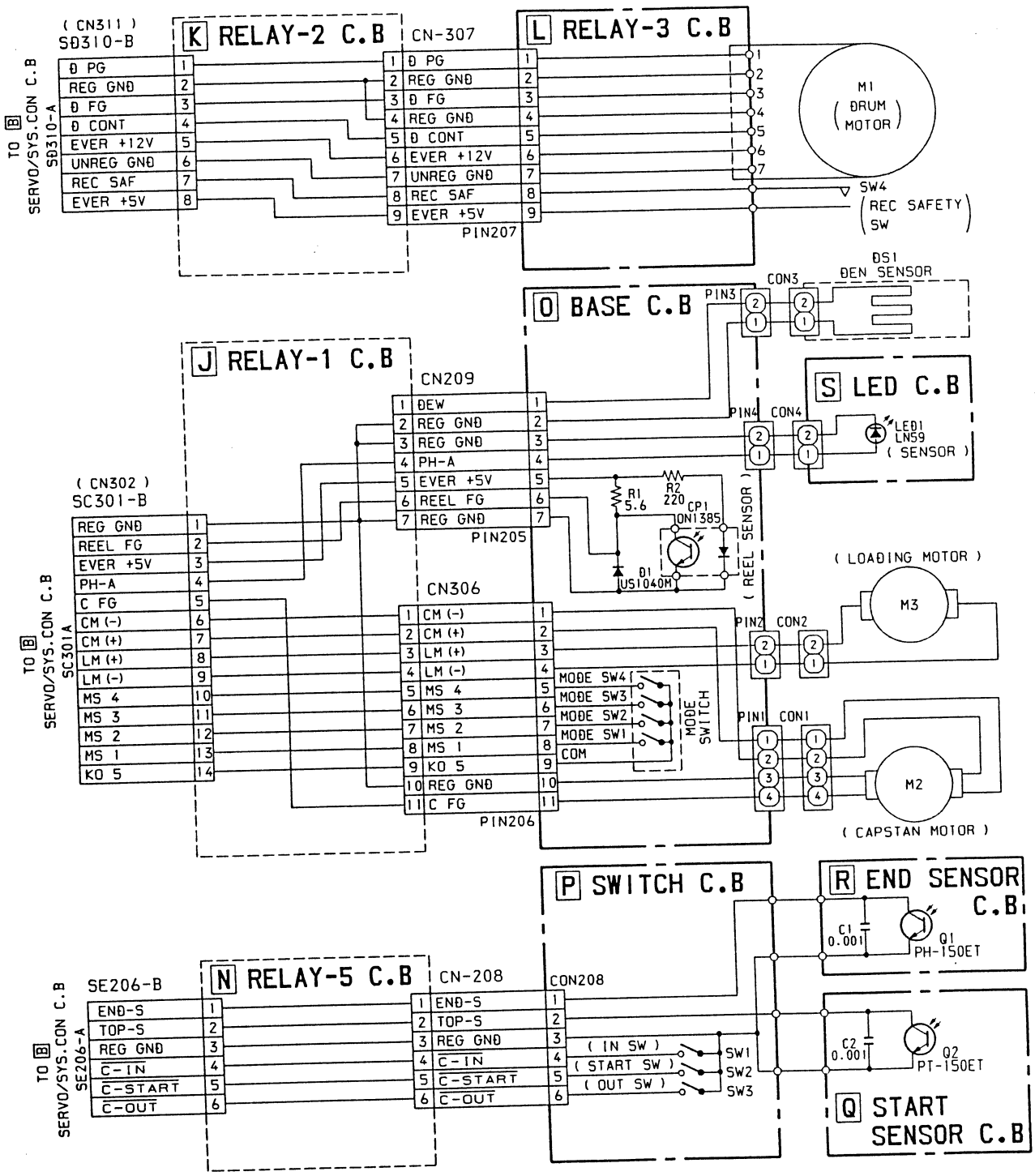
SCHEMATIC DIAGRAM – 9



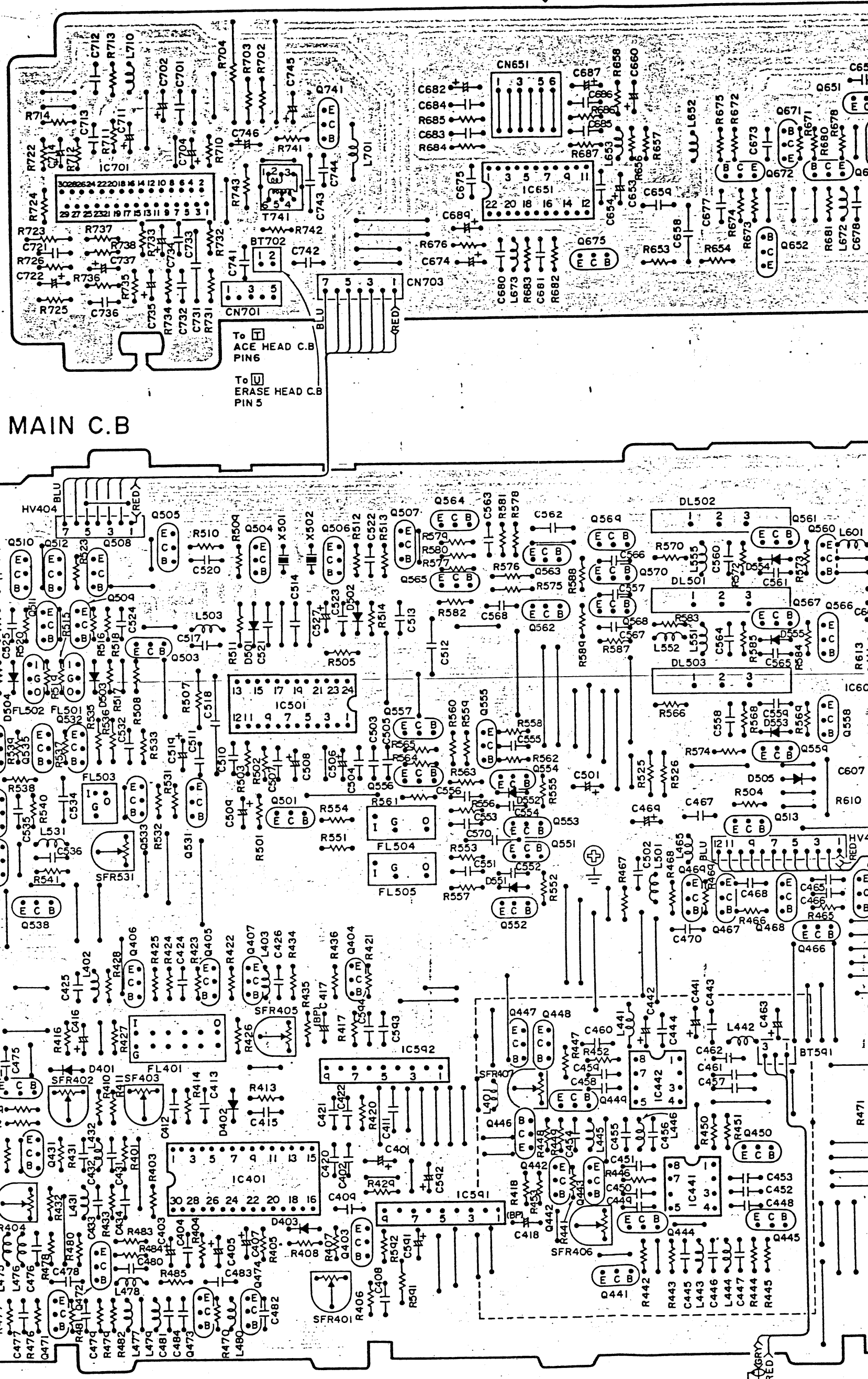

T101
D201 S3LA20
L201 39uH
18.2
18.2
UNREG 18V
C203 680 25V
D205 RD24F
C204 220 25V
R214 820 1W
GND
D202 S3LA20
12.2
L202 39uH
12.2
EVER 12V
C205 680 16V
C207 470 16V
PQ05FR21
IC204
D203 S3LA20
6.8
6.8
5.0 (0.3)
REG 5V
C206 1200 10V
4.8(0)
R208 4700
C208 100 10V
7.2
D204
C209 470 10V
ERB83-006
GND
IC203 AN7805F
7.2
5.0
C210 100 10V
C211 100 10V
IC203, 204 REGULATOR
R103 270K 1/2W
C107 400V
100V
R104 150K
R106 220
C112 0.01
SWITCHING DERIVER
C101
R107 1200
R110 1500
R109 820
D106 1SS270
D102 1SS270
D105 RD3.6ES
PRIMARY GND
PC101 ON3171R
FEED BACK COUPLER
R201 240-1/2W
4A
4B
R202 330
R203 5600
C201 0.047
C202 0.047
RV201 1K
IC201 HA17431P
VARIABLE VOLTAGE
2.5
R205 1500
GND
BT1
1 UNREG
2 UNREG
3 UNREG
4 EVER
5 REG
6 REG
7 REG
8 EVER
9 P ON
BT1
1 EVER
2 REG
3 REG
4 REG
5 DIG
6 DIG


D201 S3LA20
L201 39uH
18.2
18.2
UNREG 18V
C203 680 25V
D205 RD24F
C204 220 25V
R214 820 1W
GND
D202 S3LA20
12.2
L202 39uH
12.2
EVER 12V
C205 680 16V
C207 470 16V
PQ05FR21
IC204
D203 S3LA20
6.8
6.8
5.0 (0.3)
REG 5V
C206 1200 10V
4.8(0)
7.2
D204
C209 470 10V
R208 4700
C208 100 10V
ERB83-006
GND
IC203 AN7805F
7.2
5.0
C210 100 10V
C211 100 10V
IC203, 204 REGULATOR
FEED BACK COUPLER
R201 240-1/2W
R202 330
R203 5600
C201 0.047
C202 0.047
RV201 1K
IC201 17431P
2.5
R205 1500
GND
BT101
1 UNREG 18V
2 UNREG GND
3 UNREG GND
4 EVER 12V
5 REG 5V
6 REG GND
7 REG GND
8 EVER 5V
9 P ON
TO B SERVO/SYS CON C.B CN203
BT102
1 EVER 5V
2 REG 5V
3 REG GND
4 REG GND
5 DIG 5V
6 DIG GND
TO A MAIN C.B (VIDEOSECTION) CN405

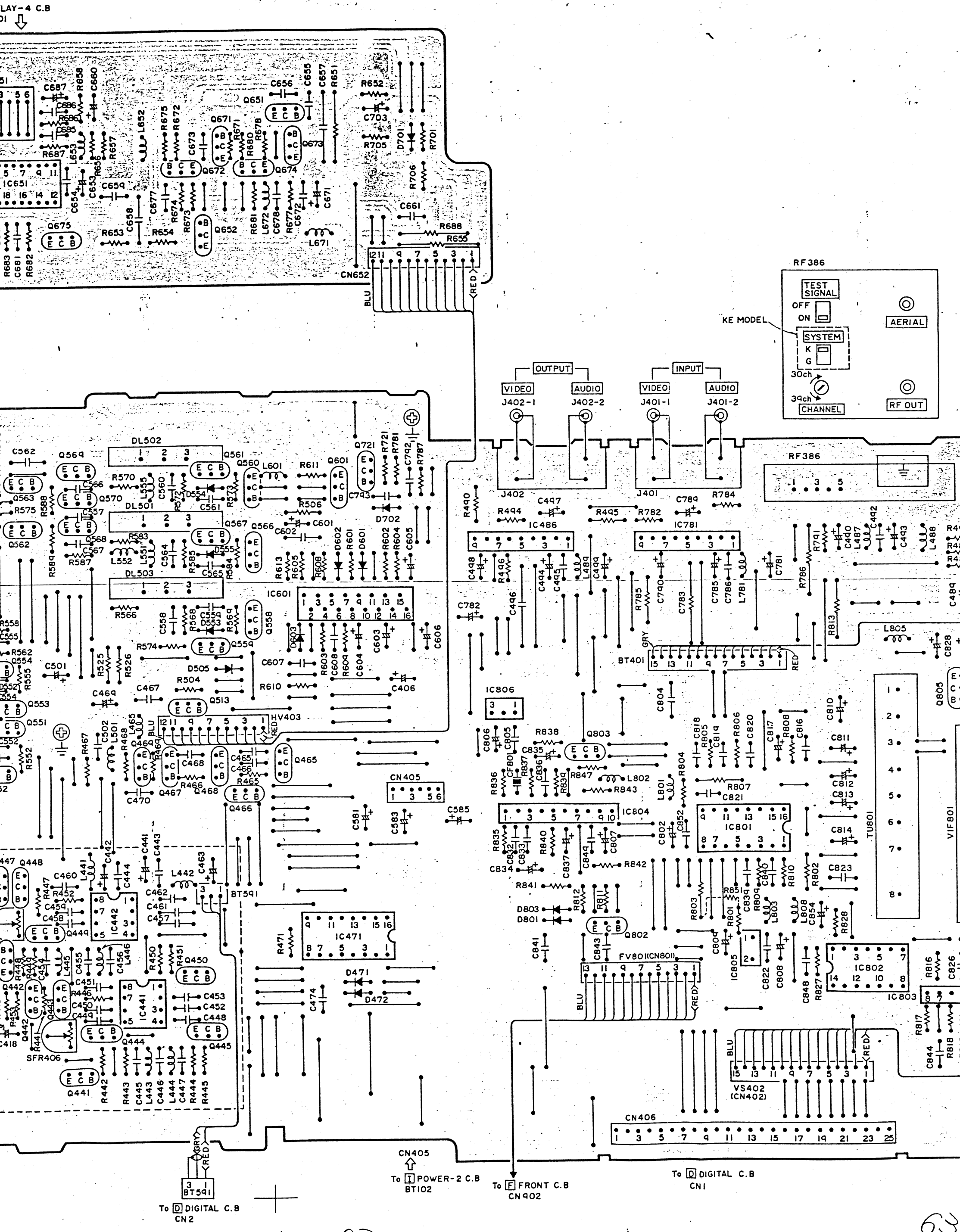
SCHEMATIC DIAGRAM – 10

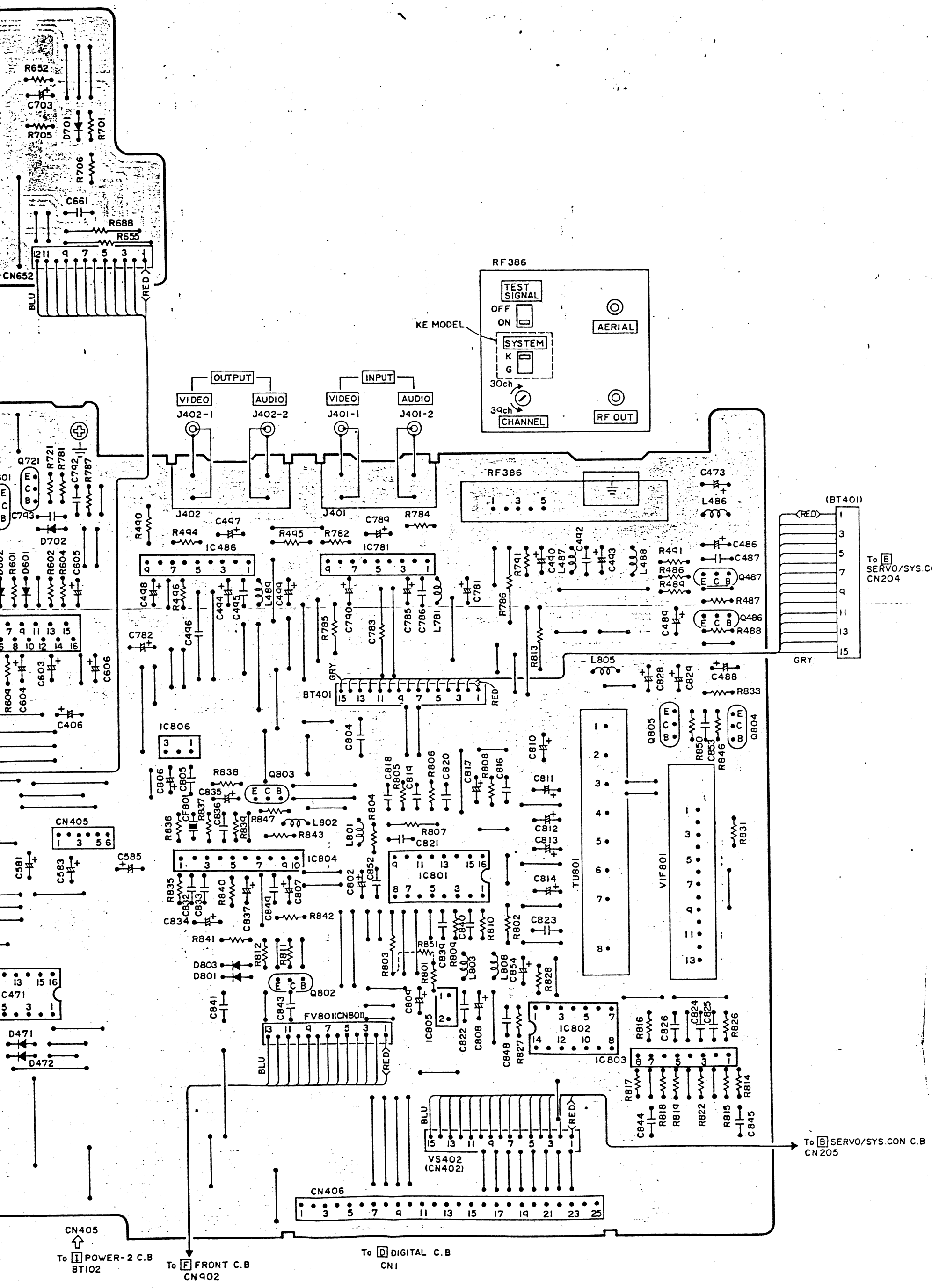


[C] HEAD AMP/AUDIO C.B

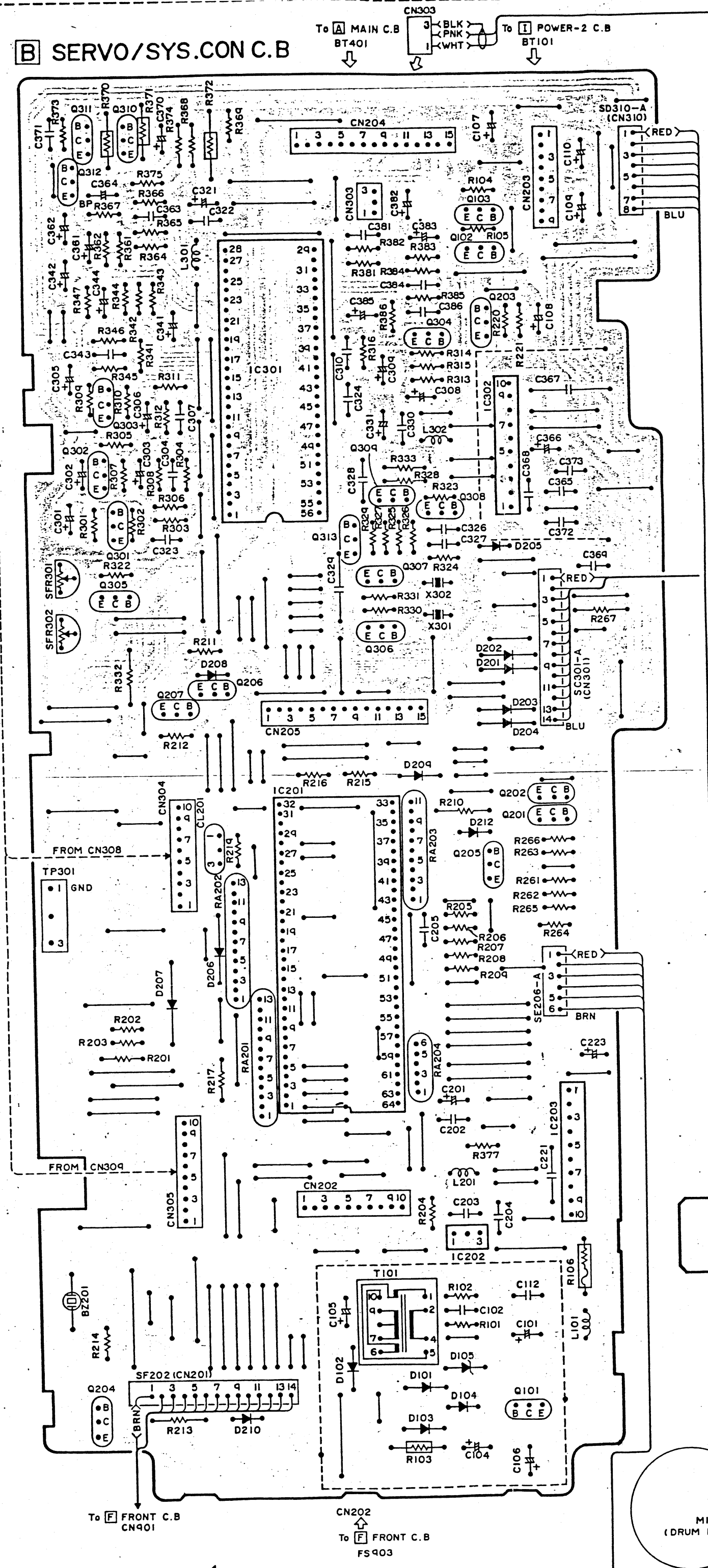


[A] MAIN C.B


LAY-4 C.B
01
CN652
BLU
RED
RF386
TEST SIGNAL
OFF
ON
KE MODEL
SYSTEM
K
G
30ch
39ch
CHANNEL
AERIAL
RF OUT
OUTPUT
VIDEO
AUDIO
J402-1
J402-2
INPUT
VIDEO
AUDIO
J401-1
J401-2
J402
J401
RF386
IC486
IC781
IC601
IC806
IC804
IC801
IC802
IC803
IC471
IC442
IC441
BT401
BT591
HV403
DL502
DL501
DL503
CN405
CN406
VS402
(CN402)
FV801(CN801)
SFR406
GRY
To D DIGITAL C.B
CN2
To I POWER-2 C.B
BT102
To F FRONT C.B
CN902
To D DIGITAL C.B
CN1


R652
C703
R705
D701
R701
R706
C661
R688
R655
CN652
BLU
RED
RF386
TEST SIGNAL
OFF
ON
KE MODEL
SYSTEM
K
G
30ch
39ch
CHANNEL
AERIAL
RF OUT
OUTPUT
VIDEO
AUDIO
J402-1
J402-2
INPUT
VIDEO
AUDIO
J401-1
J401-2
J402
J401
RF386
C473
L486
(BT401)
(RED)
GRY
To B SERVO/SYS.CON C.B CN204
Q721
R721
R781
C792
R787
C793
D702
R601
D601
R602
R604
C605
R490
R494
C497
R495
R782
C789
R784
IC486
IC781
C498
R496
C494
C495
L489
C499
C496
C782
C740
C783
C785
C786
L781
C781
R785
R786
R791
C490
L487
C492
C493
L488
R491
R486
R489
C486
C487
Q487
R487
Q486
R488
C489
L805
C828
C829
C488
R833
BT401
GRY
RED
IC806
C804
C810
Q805
Q804
R850
C853
R846
C606
C603
C604
C406
R838
Q803
C818
R805
C819
R806
C820
C817
R808
C816
C811
C806
C805
C835
CF801
R837
C836
R836
R839
R847
L802
R843
L801
R804
R807
C821
C812
C813
CN405
C585
IC804
IC801
C802
C852
C814
C581
C583
R835
C832
C833
R840
C837
C849
C807
C834
R842
C823
R841
R812
R811
R803
R851
C839
R809
C840
R810
R802
D803
D801
Q802
R801
L803
L808
C854
R828
C841
C843
C804
IC805
C822
C808
C848
R827
IC802
IC803
R816
C826
C824
C825
R826
C471
D471
D472
FV801(CN801)
BLU
RED
R817
R818
R819
R822
R815
R814
C844
C845
VS402
(CN402)
CN406
TU801
VIF801
R831
To B SERVO/SYS.CON C.B CN205
CN405
To I POWER-2 C.B BT102
To F FRONT C.B CN902
To D DIGITAL C.B CN1

B SERVO/SYS.CON C.B

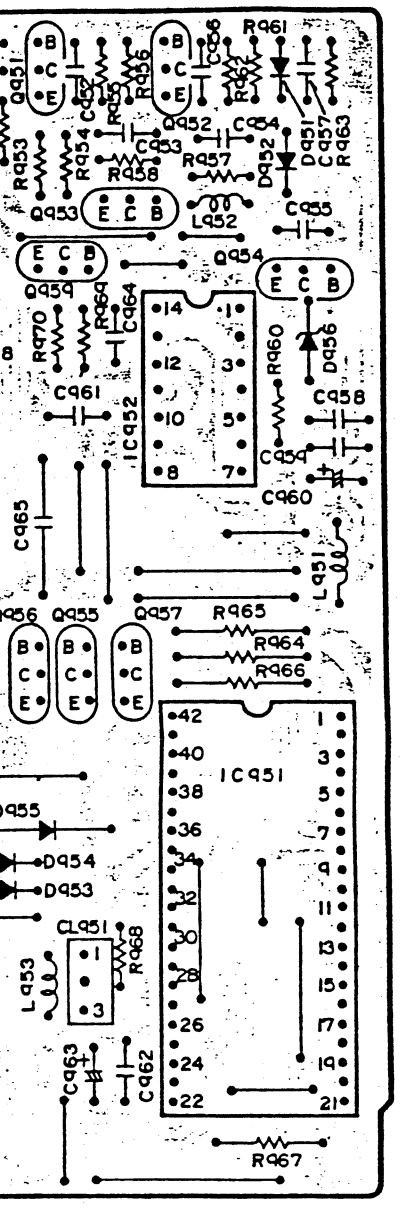


To [I] POWER-2 C.B
BT101

SD310-A (CN310)
RED
BLU
SC301-A (CN301)
BLU
RED
SE206-A
BRN
To CN304
To CN305
CN308
CN309
IC951
IC952
IC302
IC203
CN203
L951
L952
L953
CL951
Q103
Q203
Q202
Q201
Q101
Q951
Q952
Q953
Q954
Q955
Q956
Q957
Q958
Q959
D205
D202
D201
D203
D204
D212
D951
D952
D953
D954
D955
D956
R104
R105
R220
R221
R267
R206
R207
R208
R209
R264
R266
R263
R261
R262
R265
R377
R106
R951
R952
R953
R954
R955
R956
R957
R958
R960
R961
R962
R963
R964
R965
R966
R967
R968
R969
R970
C107
C110
C109
C108
C367
C366
C373
C365
C372
C369
C368
C223
C221
C204
C112
C102
C101
C106
C951
C952
C953
C954
C955
C956
C957
C958
C959
C960
C961
C962
C963
C964
C965
C966
C968
M1 (DRUM MOTOR)
M2 (CAPSTAN MOTOR)
M3 (LOADING MOTOR)
PIN601
PIN207
PIN5
PIN6
CON4
CON701
CON702
SD310-B (CN311)
CN307
CN651
WHITE : CH-1
RED : CH-2
VIDEO HEAD
SW1 (IN SW)
SW2 (START
SW4 (REC SAFETY SW)
LED1 (SENSOR)
Q1
Q2
C1
C2
R3 PIN6
FEH (FULL ERASE HEAD)
ACEH (AUDIO/CTL) HEAD
AUDIO HEAD
AUDIO ERASE HEAD
CTL HEAD
To [C] HEAD AMP/AUDIO C.B BT702
To [C] HEAD AMP/AUDIO C.B CN701
To [C] HEAD AMP/AUDIO C.B CN651
To [O] BASE C.B PIN4
YEL
BLU
WHT
RED
BRN
BLK
PNK
ORG
WHT/RED

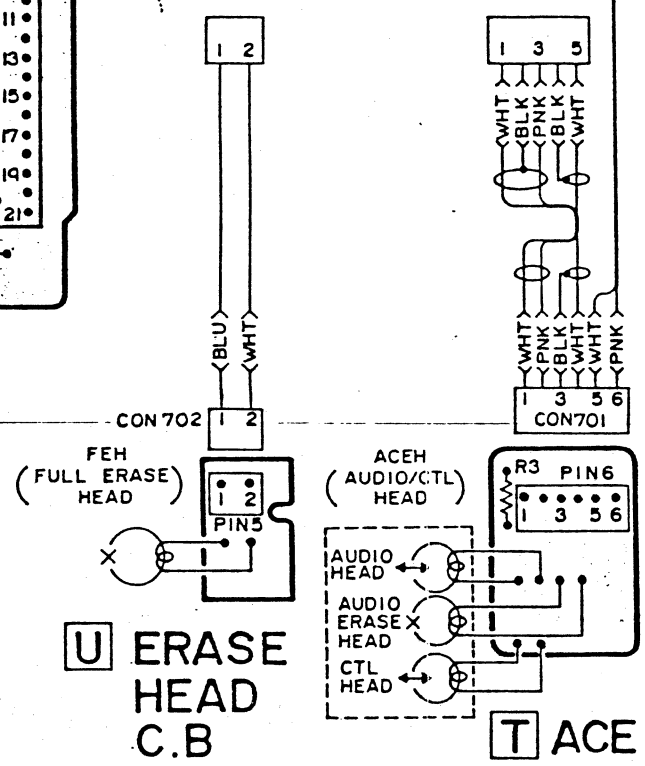
[E] AUTO-TRACKING C.B
[O] BASE C.
[U] ERASE HEAD C.B
[T] ACE HEAD C.B
[K] RELAY-2 C.B
[M] RELAY-4 C.B
[L] RELAY-3 C.B
[R] END SENSOR C.B
[Q] START SENSOR C.B
[S] LED C.B
[P] SWITC

UTO -TRACKING C.B



To [C] HEAD AMP/AUDIO C.B BT702

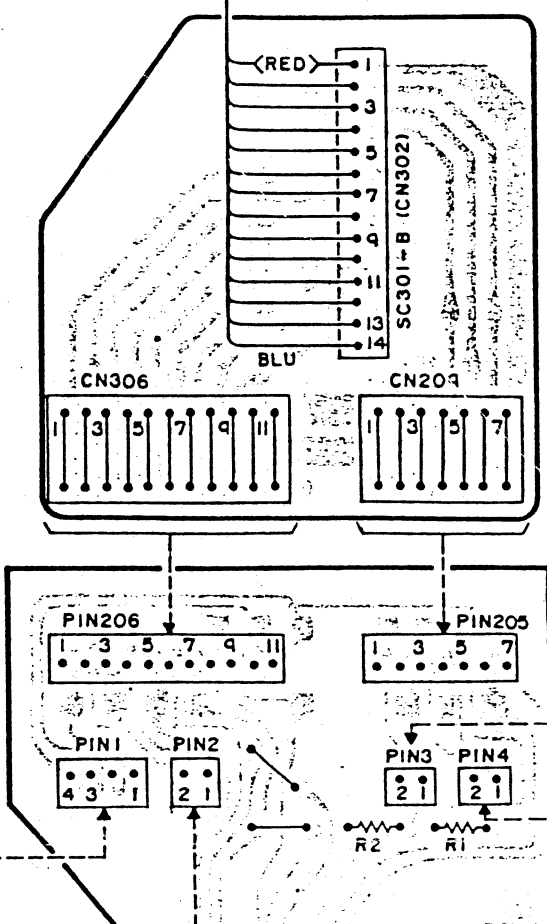
To [C] HEAD AMP/AUDIO C.B CN701



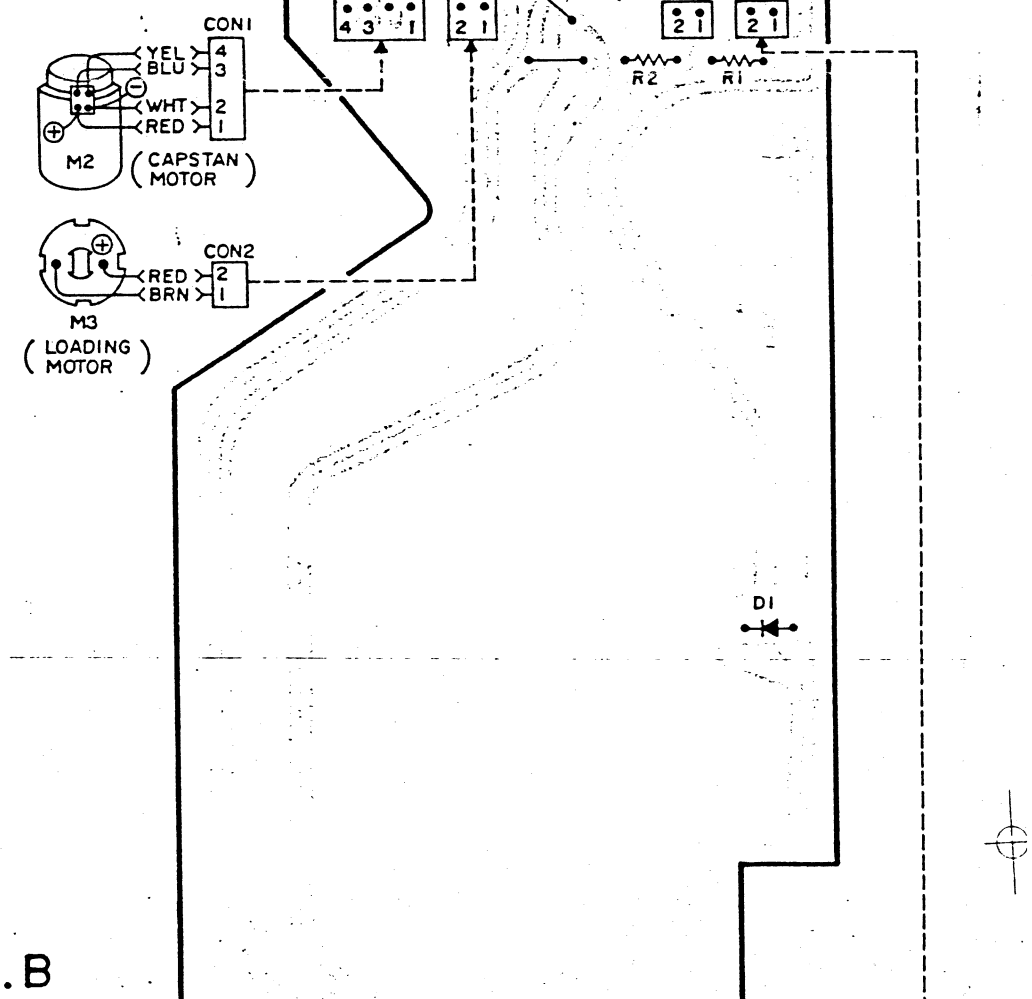
[U] ERASE HEAD C.B

[T] ACE HEAD C.B

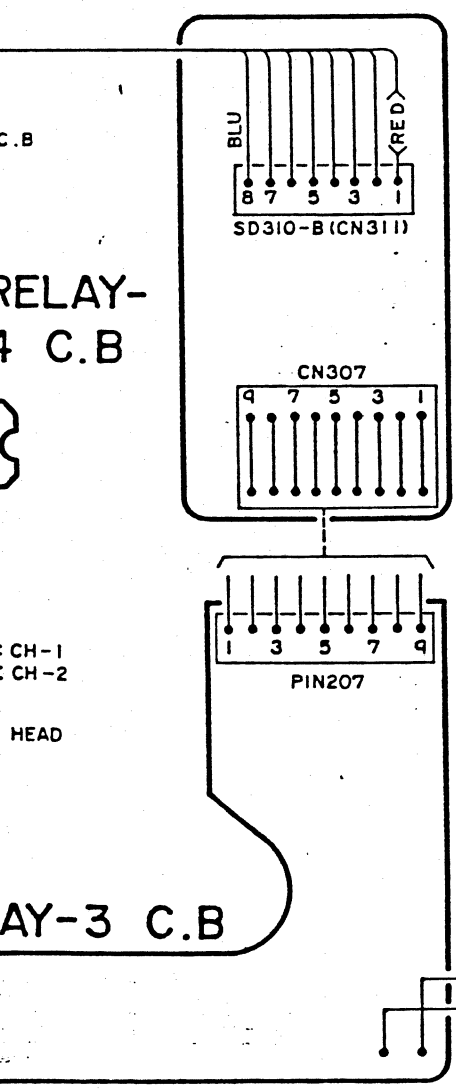
[J] RELAY-1 C.B



[O] BASE C.B



[K] RELAY-2 C.B

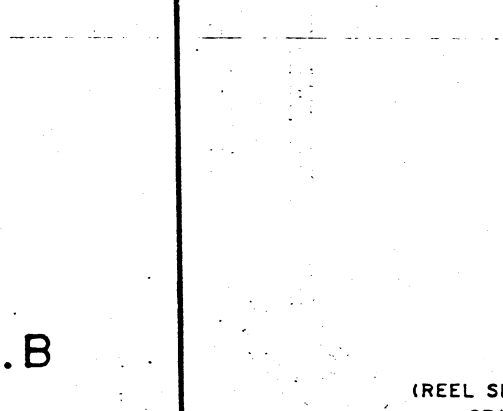


[R] END SENSOR C.B

[Q] START SENSOR C.B

[S] LED C.B

[P] SWITCH C.B



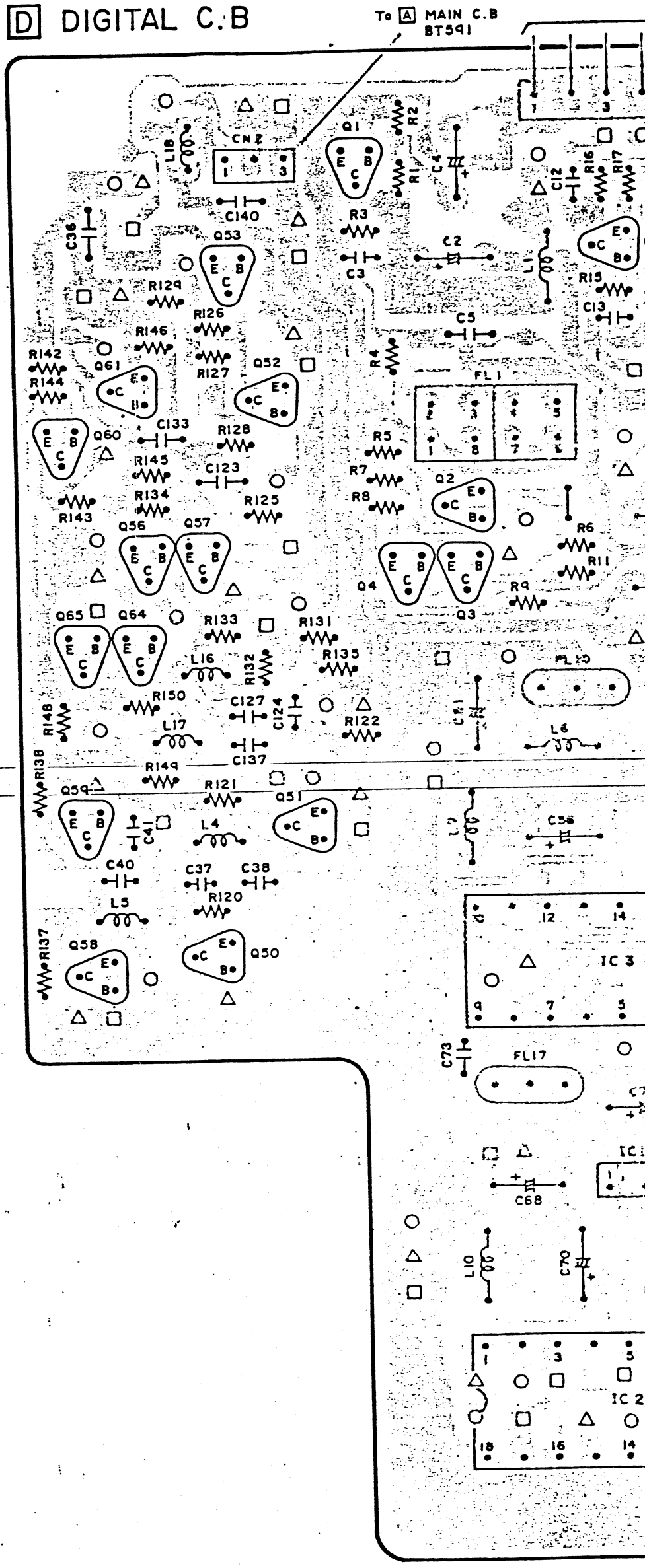
[N] RELAY-5 C.B

(REEL SENSOR)
CP1

MODE SWITCH
SW1~SW4

SW4 (REC SAFETY SW)
YEL
YEL

D DIGITAL C.B


To A MAIN C.B BT591
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R1
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R16
R17
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Q53
C2
C3
L1
R15
R129
R126
C5
C13
R146
R142
R144
Q61
R127
Q52
R4
FL1
C133
R128
Q60
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R5
R7
C123
Q2
R8
R134
R125
R143
R6
Q56
Q57
R11
Q4
Q3
R9
Q65
Q64
R133
R131
L16
R132
R135
FL10
R150
C127
C124
R148
L17
R122
C11
L6
C137
R149
R121
R138
Q59
Q51
L4
C4
C56
C40
C37
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IC 3
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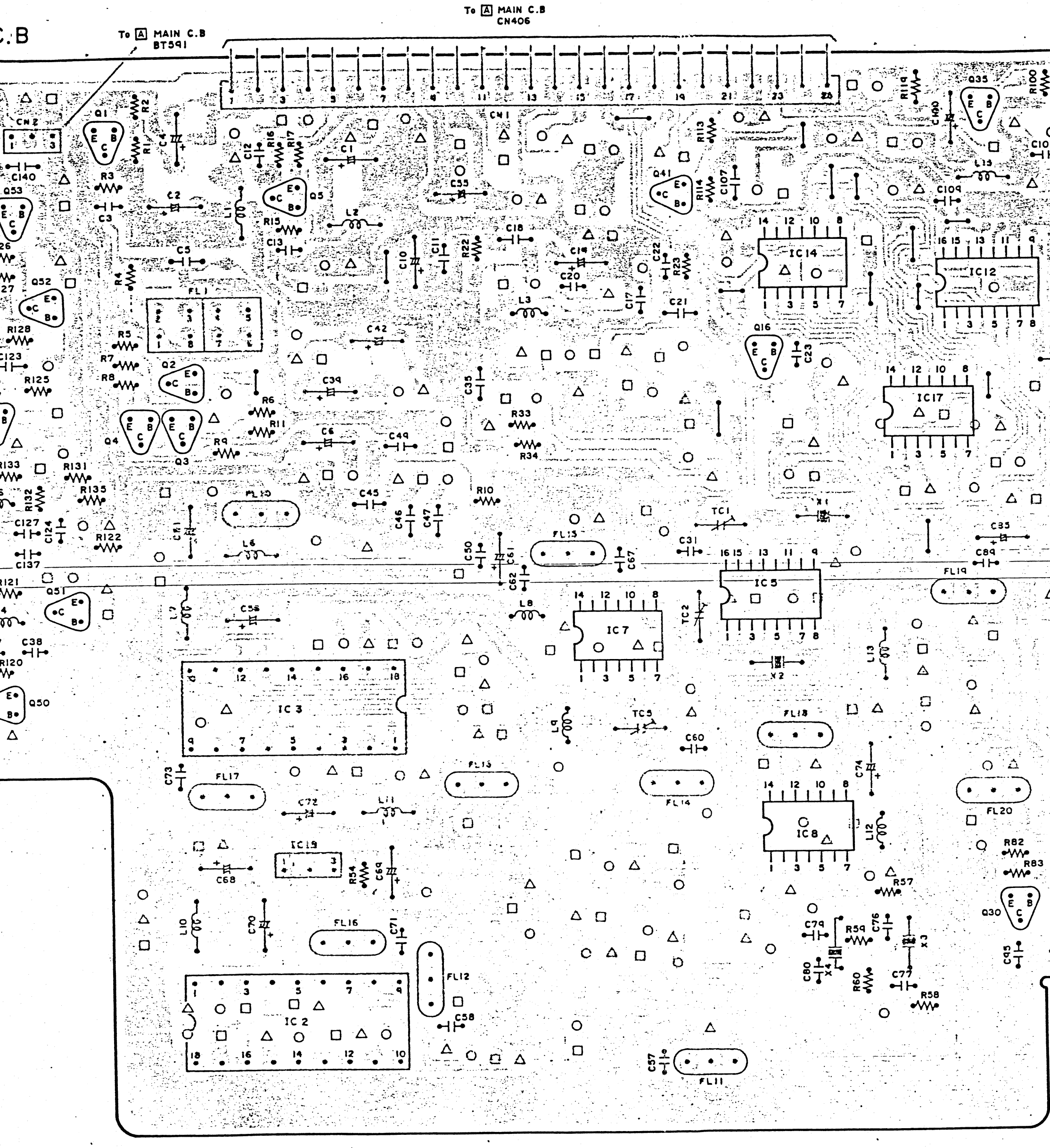
FL17
C68
L10
C69
IC 2

C.B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BT591
To A MAIN C.B
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Q30
Q35
Q41
Q50
Q51
Q52
Q53
IC14
IC12
IC17
IC7
IC5
IC3
IC2
IC19
IC8
FL1
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C109
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R82
R83
R100
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R114
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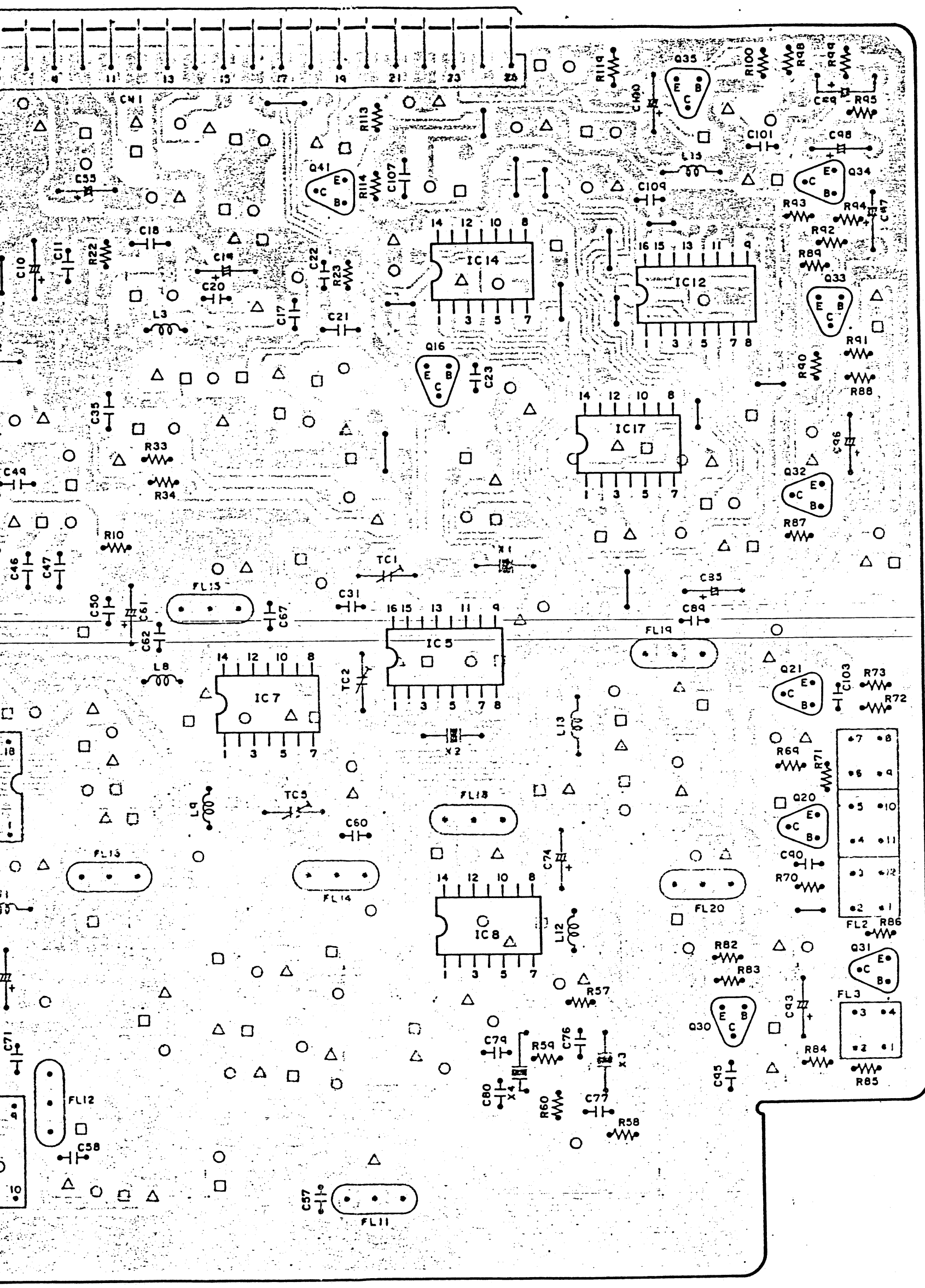
R132
R133
R135

To [A] MAIN C.B
CN406



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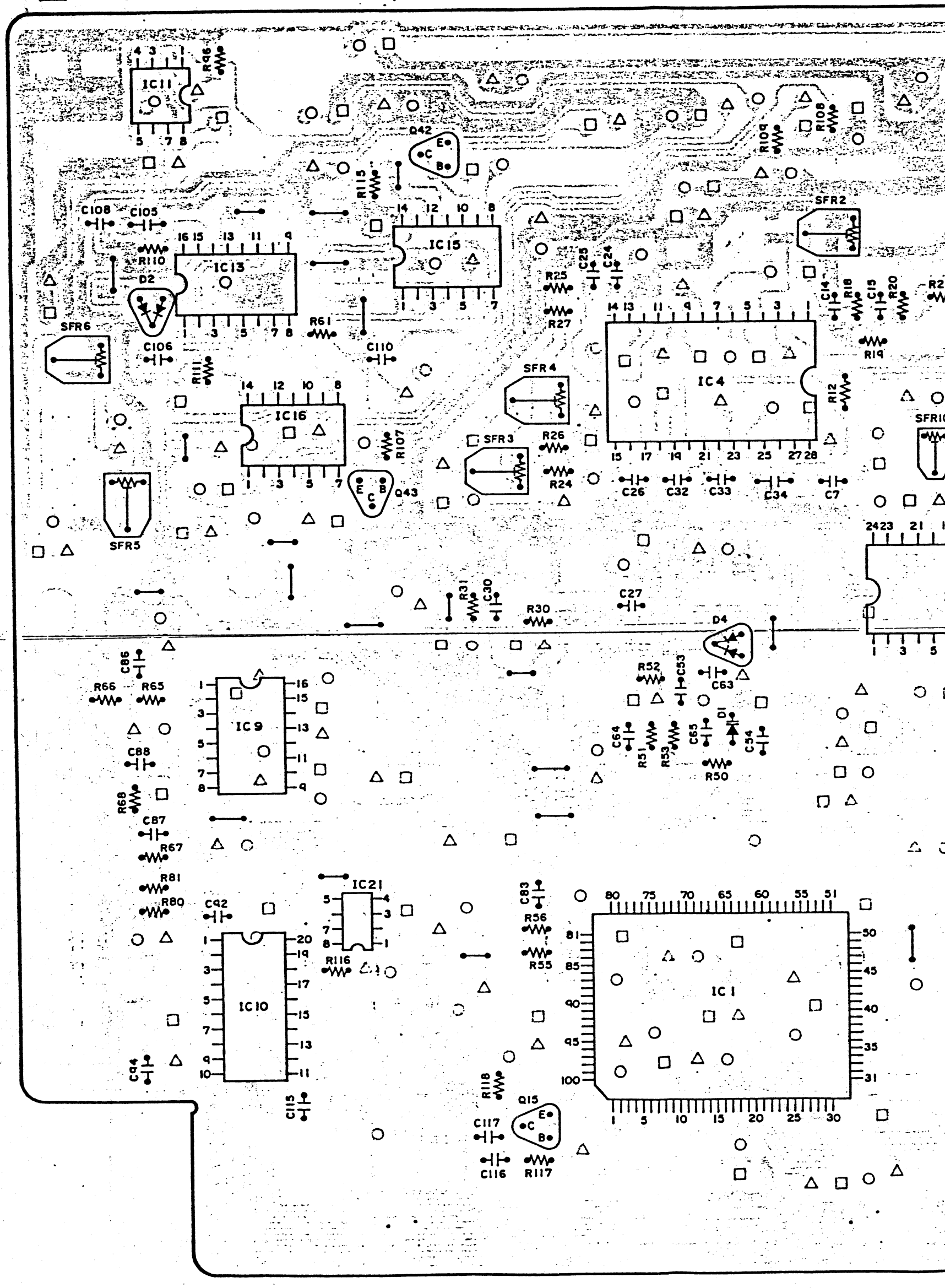
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B
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R110
IC13
D2
C25
C24
R25
R27
SFR6
R61
C106
C110
R111
SFR4
IC4
R12
R19
C14
R18
C15
R20
IC16
R107
SFR3
R26
R24
Q43
C26
C32
C33
C34
C7
SFR5
R31
C30
R30
C27
D4
C86
R66
R65
IC9
R52
C53
C63
C88
R68
C64
R51
R53
C65
C54
R50
C87
R67
R81
R80
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IC1
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R116
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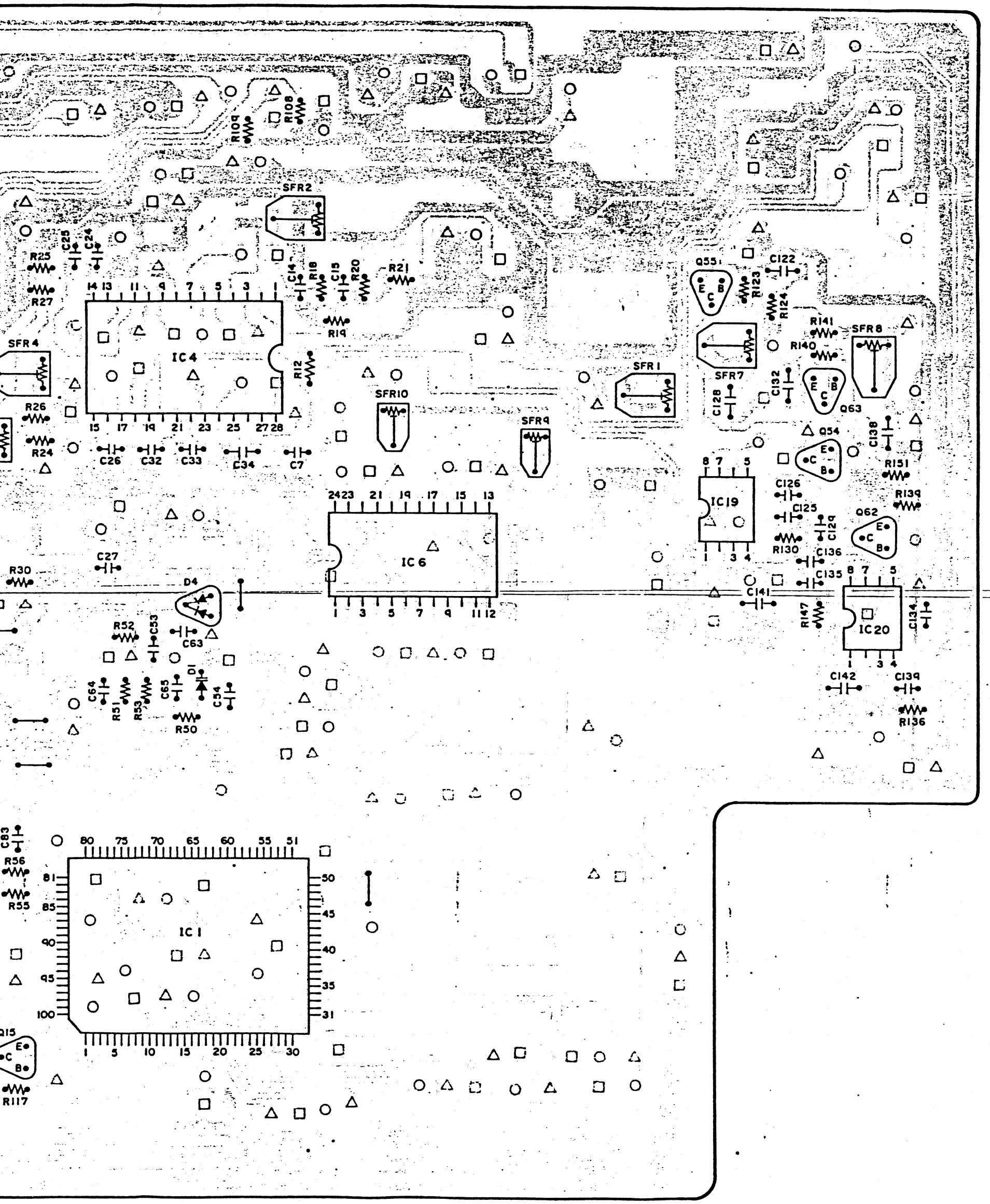
C117
C116
R117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SFR4
R26
R24
C26
C32
C33
C34
C7
SFR10
SFR9
SFR1
SFR7
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C122
R123
R124
R141
R140
SFR8
C132
C128
Q63
Q54
C138
R151
C126
C125
C129
R130
R139
Q62
C136
C135
C141
R147
IC19
IC20
C134
C142
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IC6
C27
R30
D4
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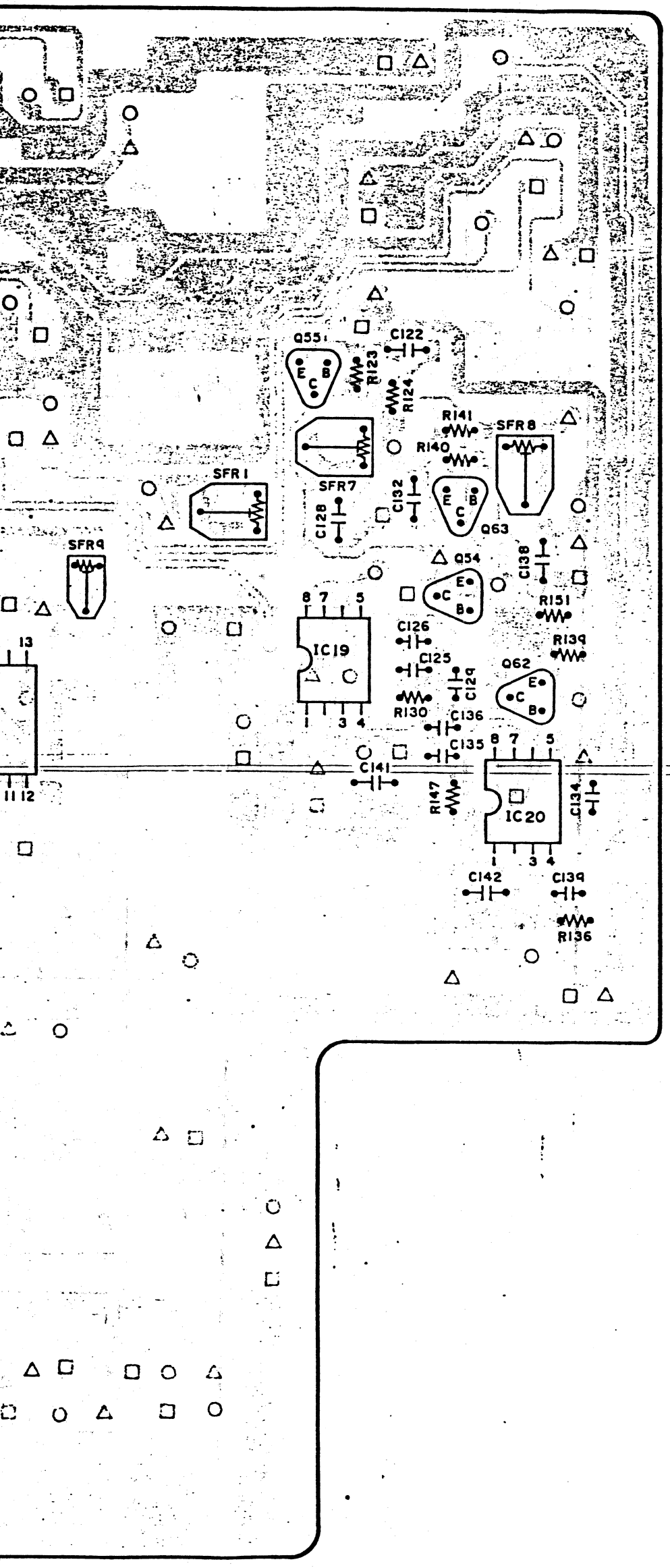
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R151
8 7 5
IC19
C126
C125
C129
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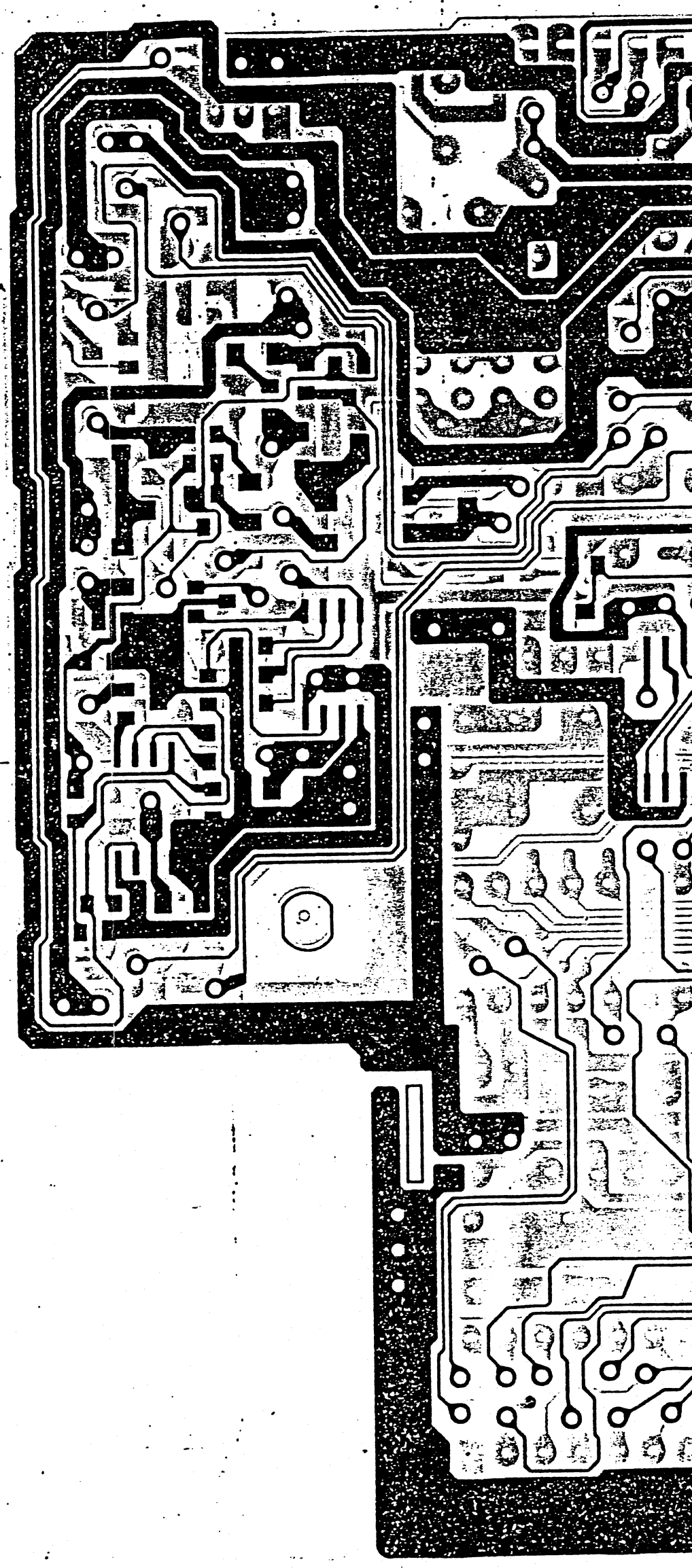
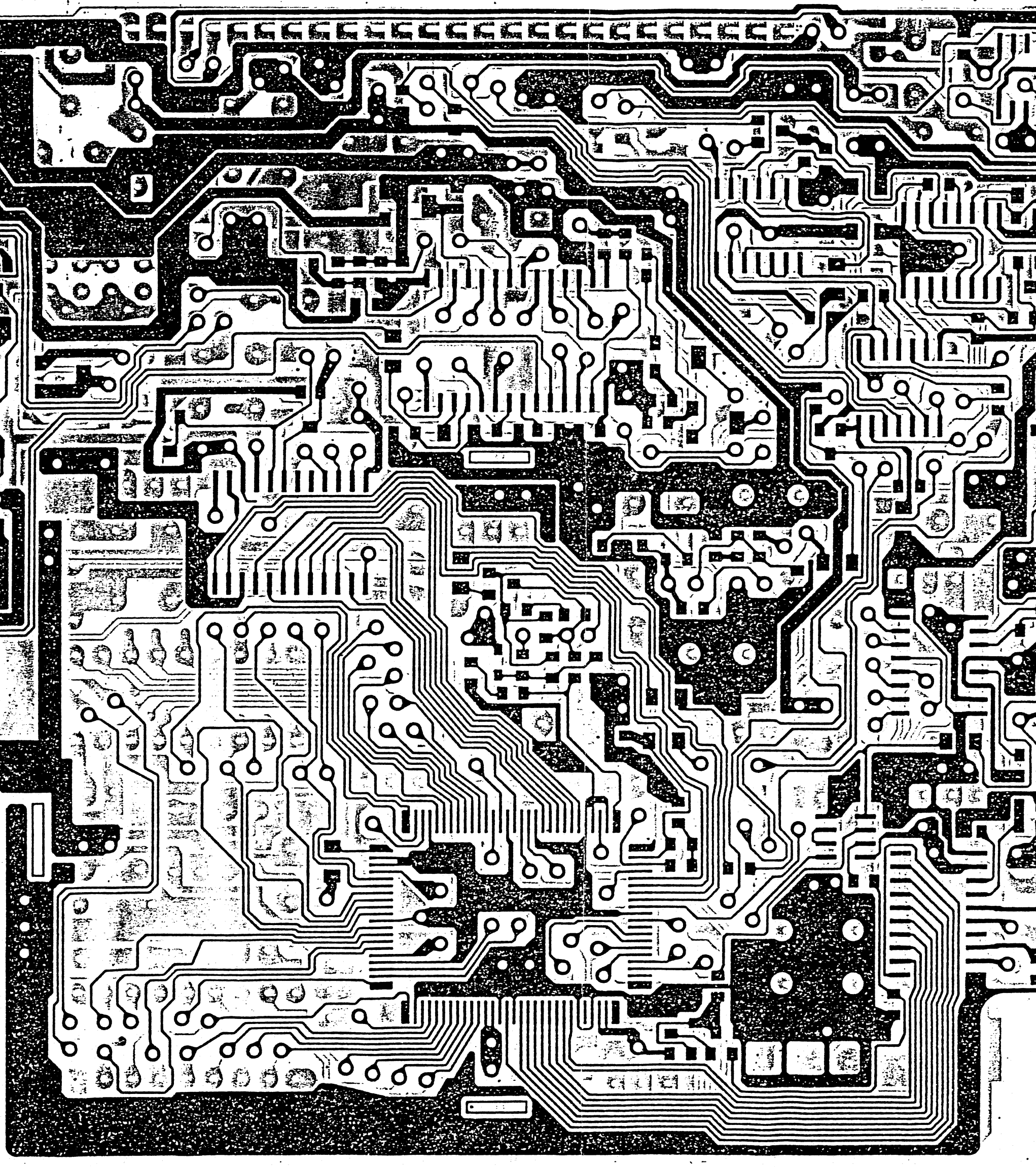
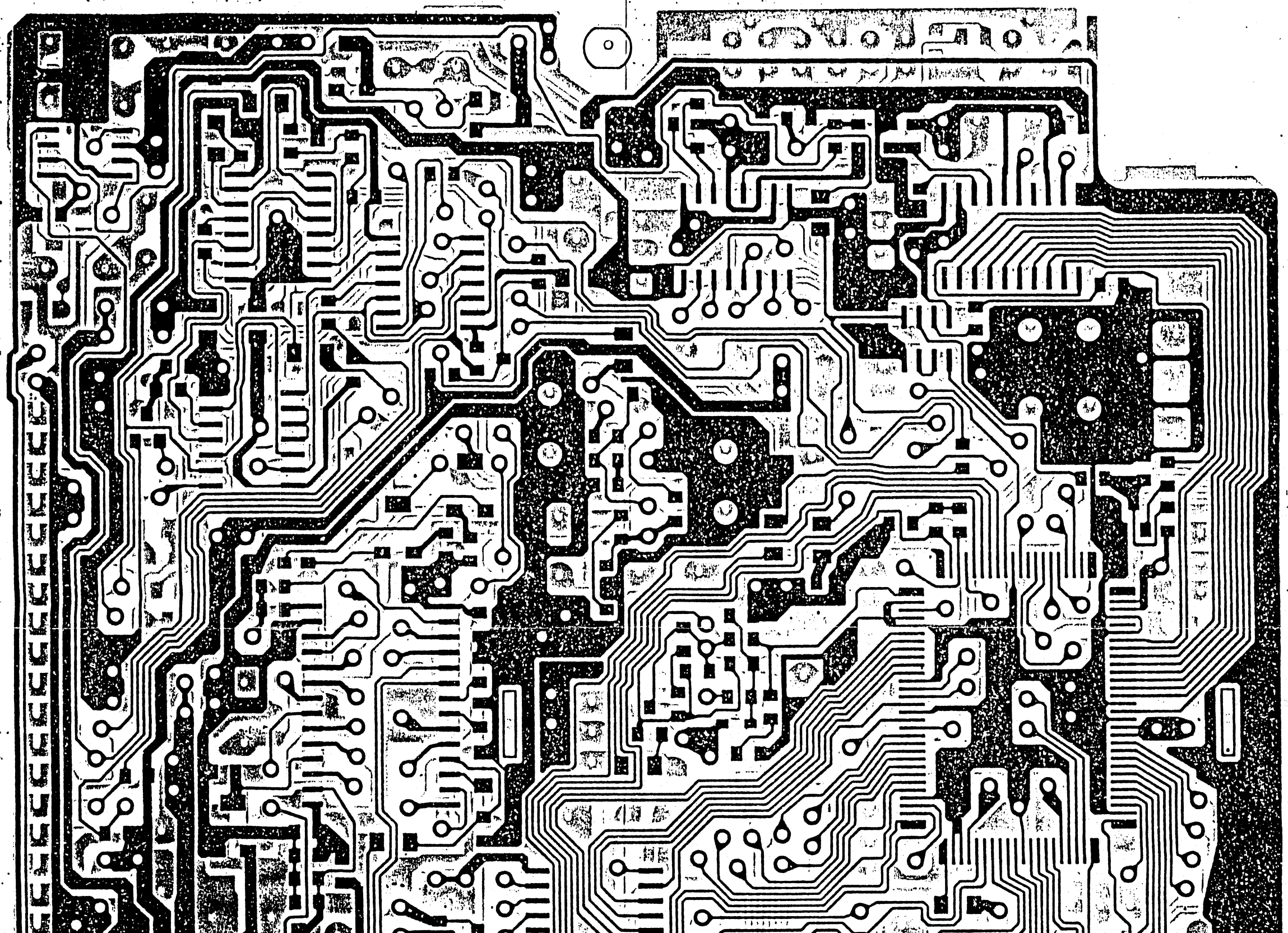
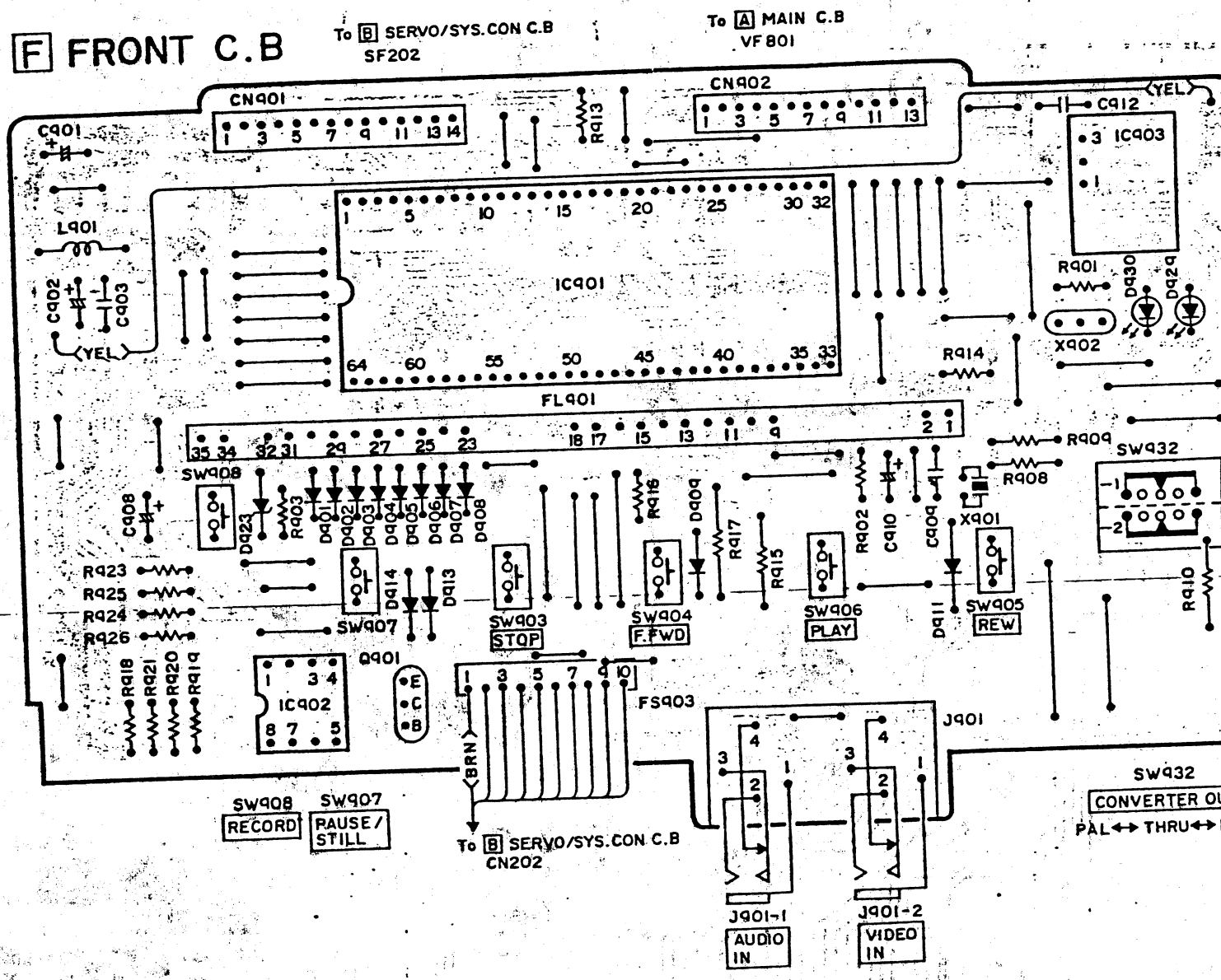
C142
C139
R136
11 12





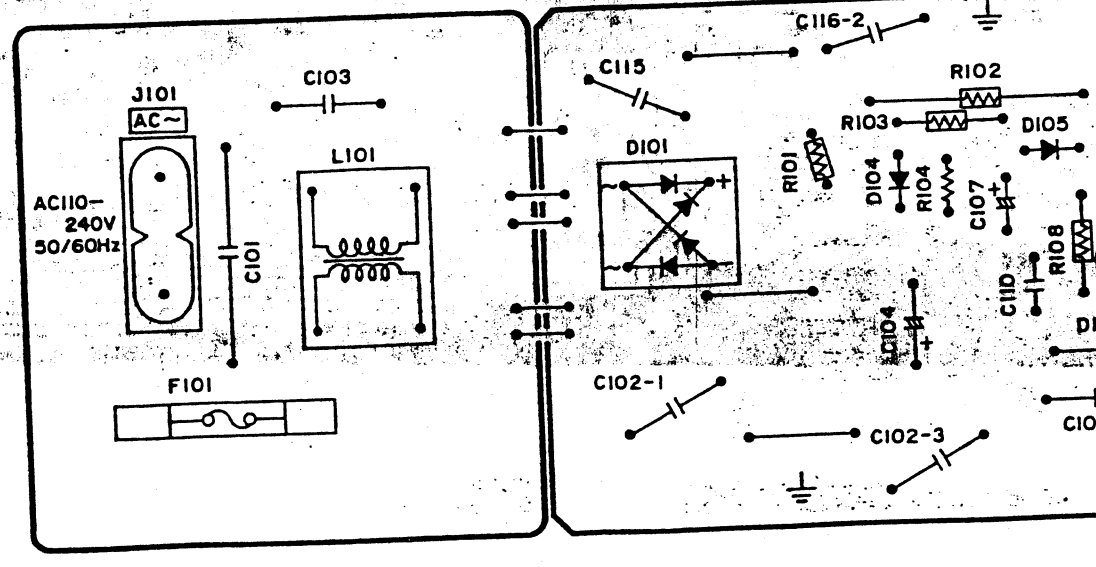


F FRONT C.B

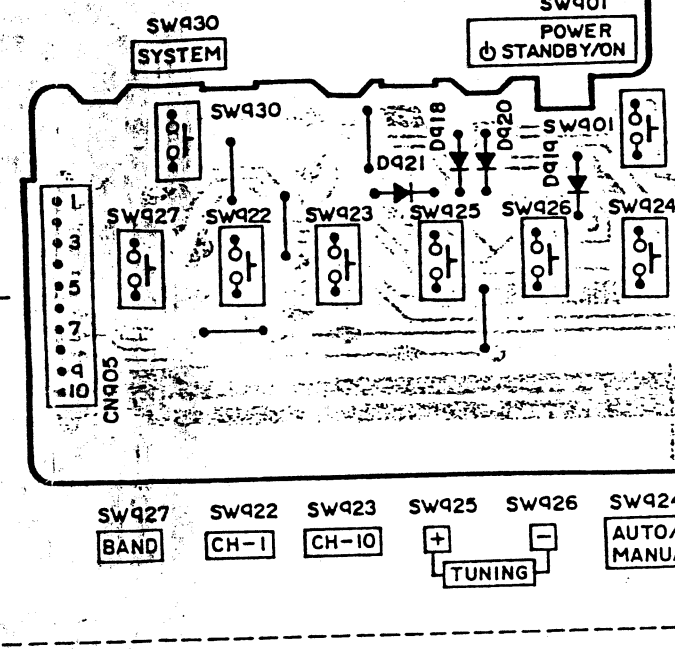


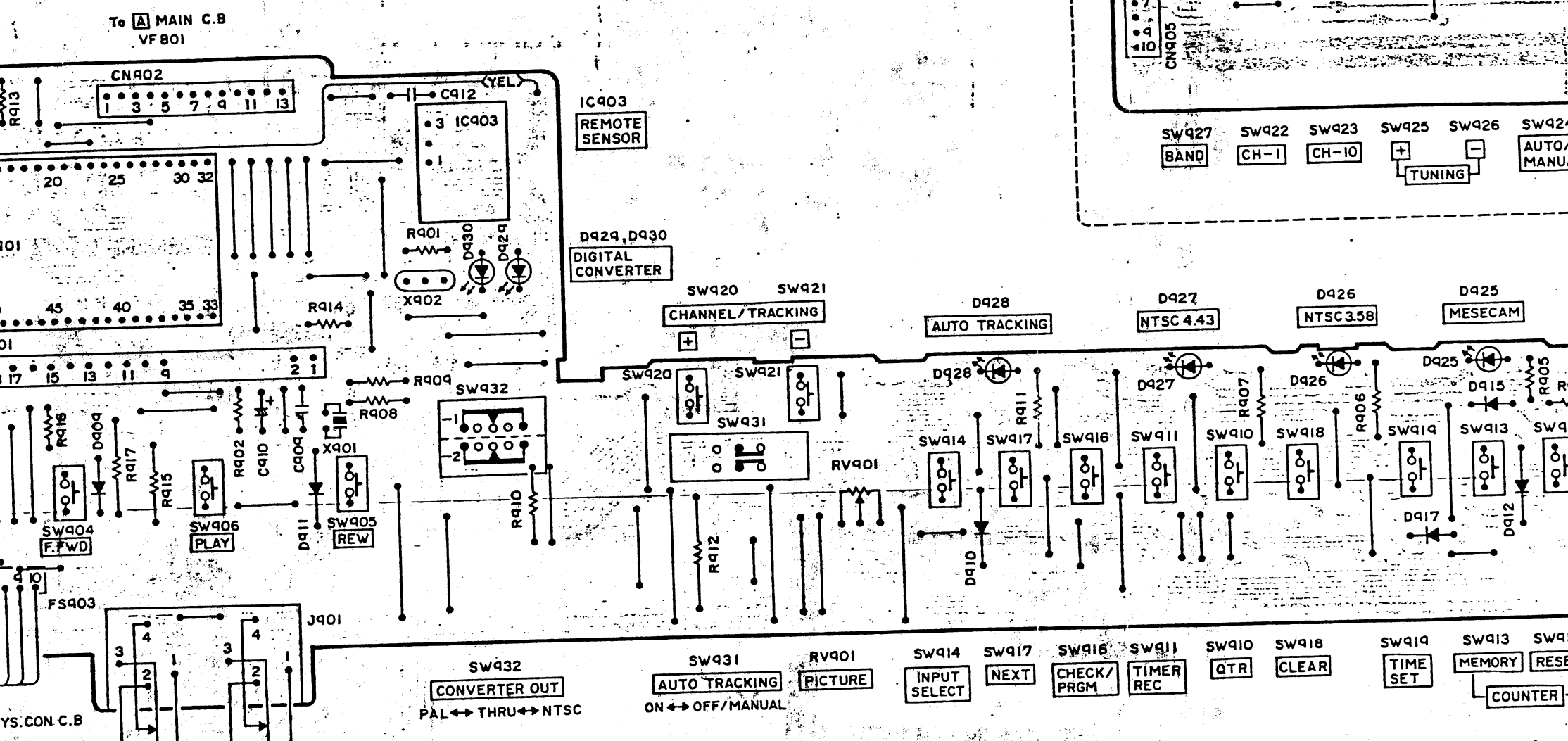
H POWER-1 C.B

I POWER-2 C.B

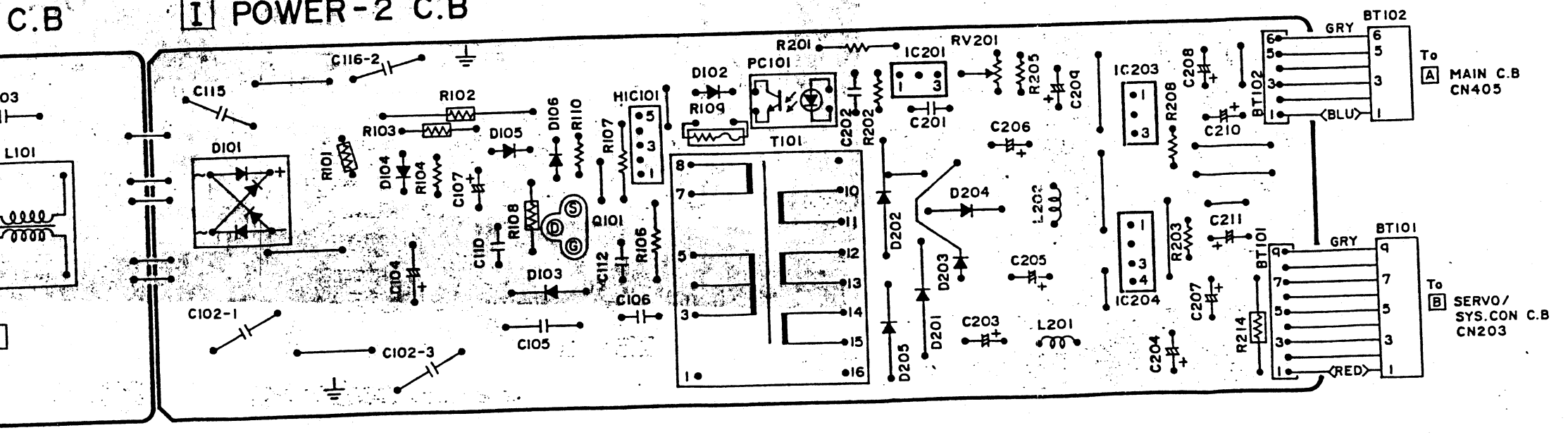


G KEY SWITCH C.B

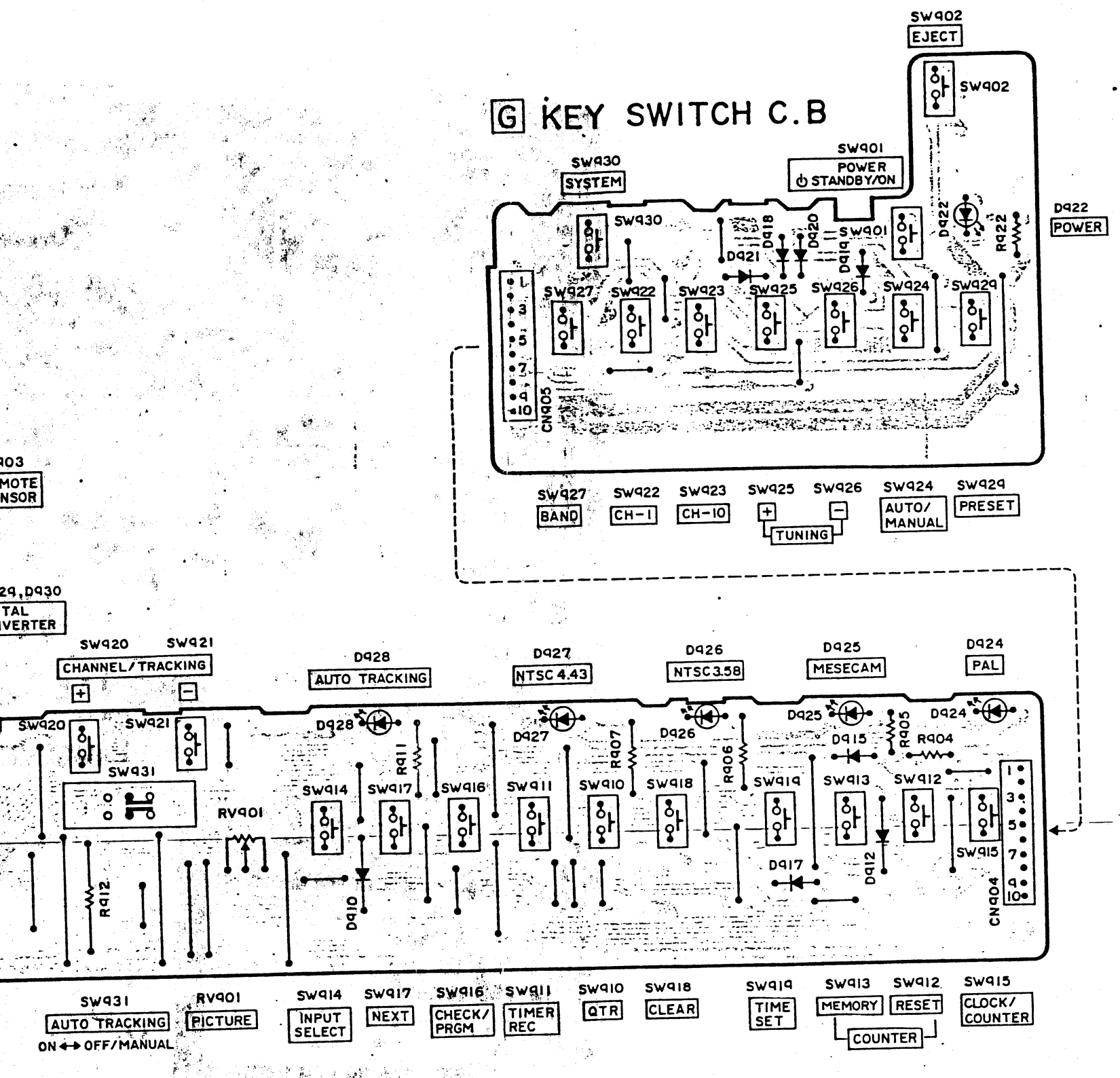


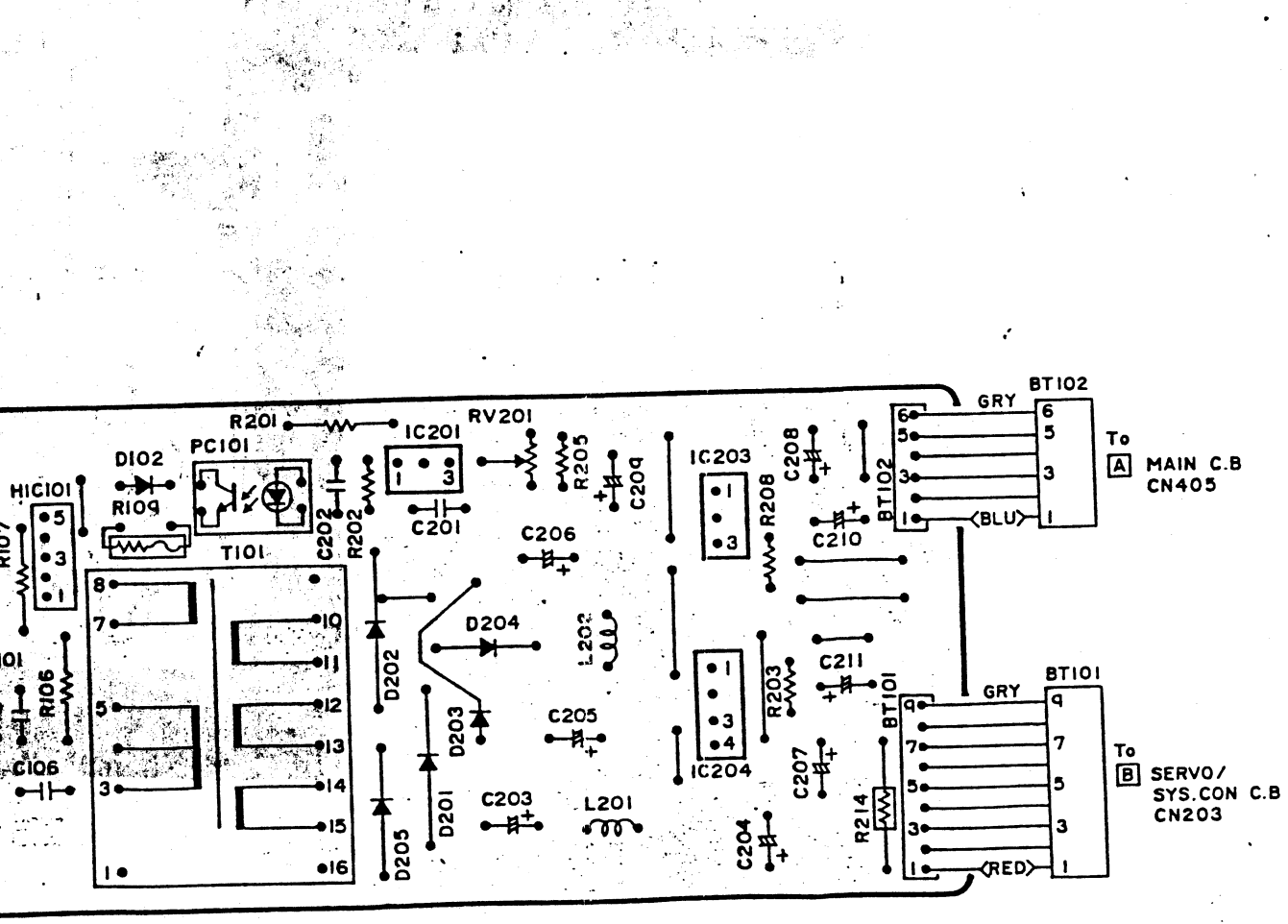


I POWER-2 C.B



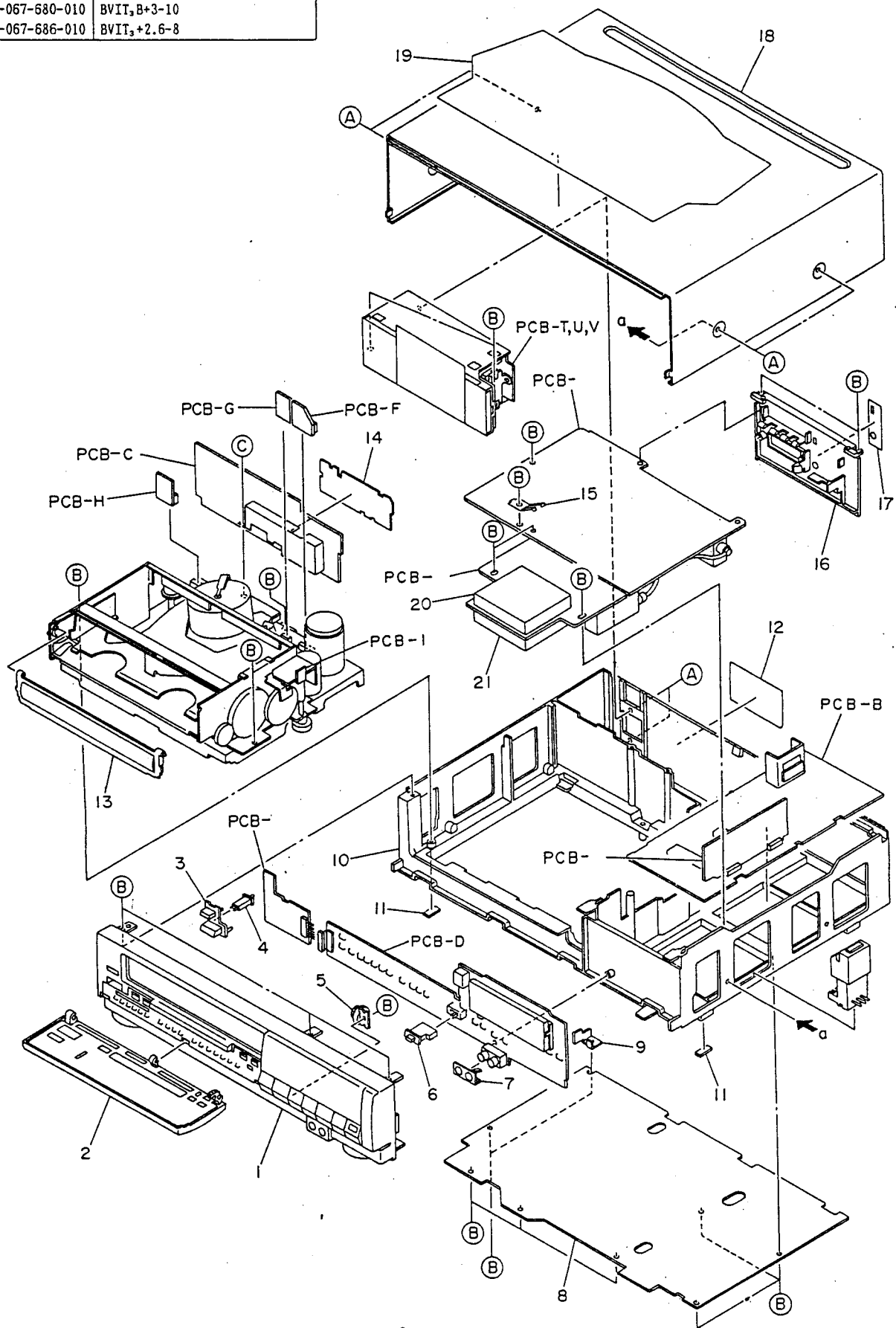
G KEY SWITCH C.B





EXPLODED VIEW – 1

REF.NO.	PART NO.	DESCRIPTION
A	87-067-660-010	BVT_2+3-8 W/O SLOT (B)
B	87-067-680-010	$BVIT_3$B+3-10
C	87-067-686-010	$BVIT_3$+2.6-8



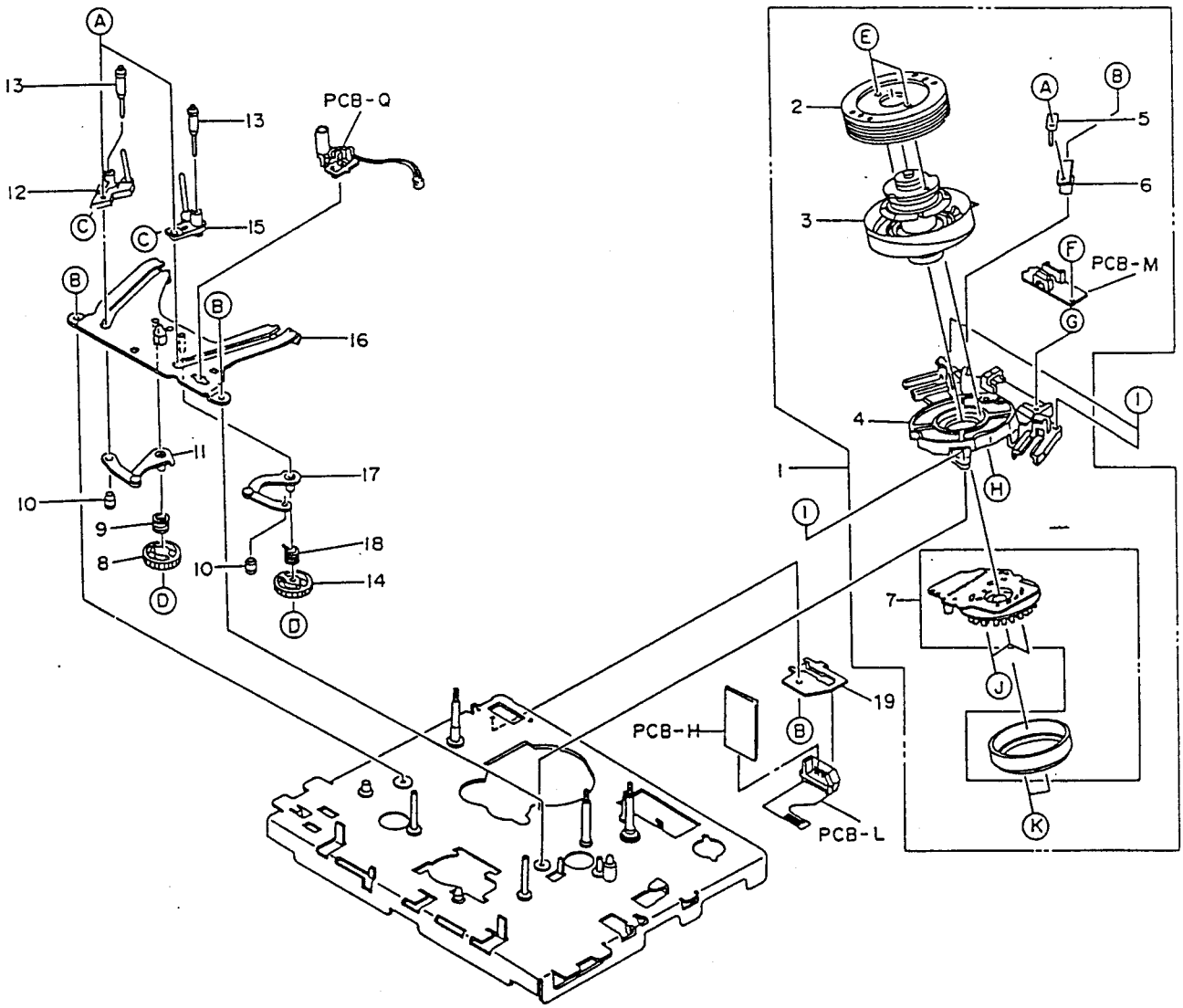
MECHANICAL PARTS LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	1-1	09-057-088-010	CABINET FRONT ASSY	%	1
	1-2	09-057-089-010	DOOR ASSY	%	1
	1-3	$80-JU4-004-010	KEY,POWER	%	1
	1-4	$80-JU4-007-010	GUIDE,LIGHT PO	%	1
	1-5	87-063-144-010	OIL-DUMPER 37		1
	1-6	$80-JU4-018-010	KNOB,SLIDE	%	1
	1-7	---	PLATE,EARTH FR		1
	1-8	$80-JU4-023-010	BOTTOM 2	%	1
	1-9	---	EARTH,1		1
	1-10	---	CABINET,MAIN 2		1
	1-11	$89-JU5-018-110	FELT,FOOT		2
	1-12	$80-JU4-015-010	PLATE,SPEC(H)	%	1
	1-12	$80-JU4-022-010	PLATE,SPEC(E)	%	1
	1-13	$80-JU4-016-010	DOOR,CASSETTE	%	1
	1-14	80-JU4-208-010	SHIELD,HA2	%	1
	1-15	89-JU7-211-110	PLATE,EARTH		1
	1-16	$89-JU5-011-310	PANEL,JACK		1
	1-17	$89-JU5-024-010	PLATE,JACK(H)		1
	1-17	80-JU4-024-010	PLATE,JACK(E)	%	1
	1-18	$89-JU5-009-110	CABINET,STEEL		1
	1-19	---	SHEET POP SH		1
	1-20	80-JU4-205-010	SHEELD,D2	%	1
	1-21	80-JU4-204-010	SHEELD,D1	%	1

(
SHIELD

EXPLODED VIEW – 2

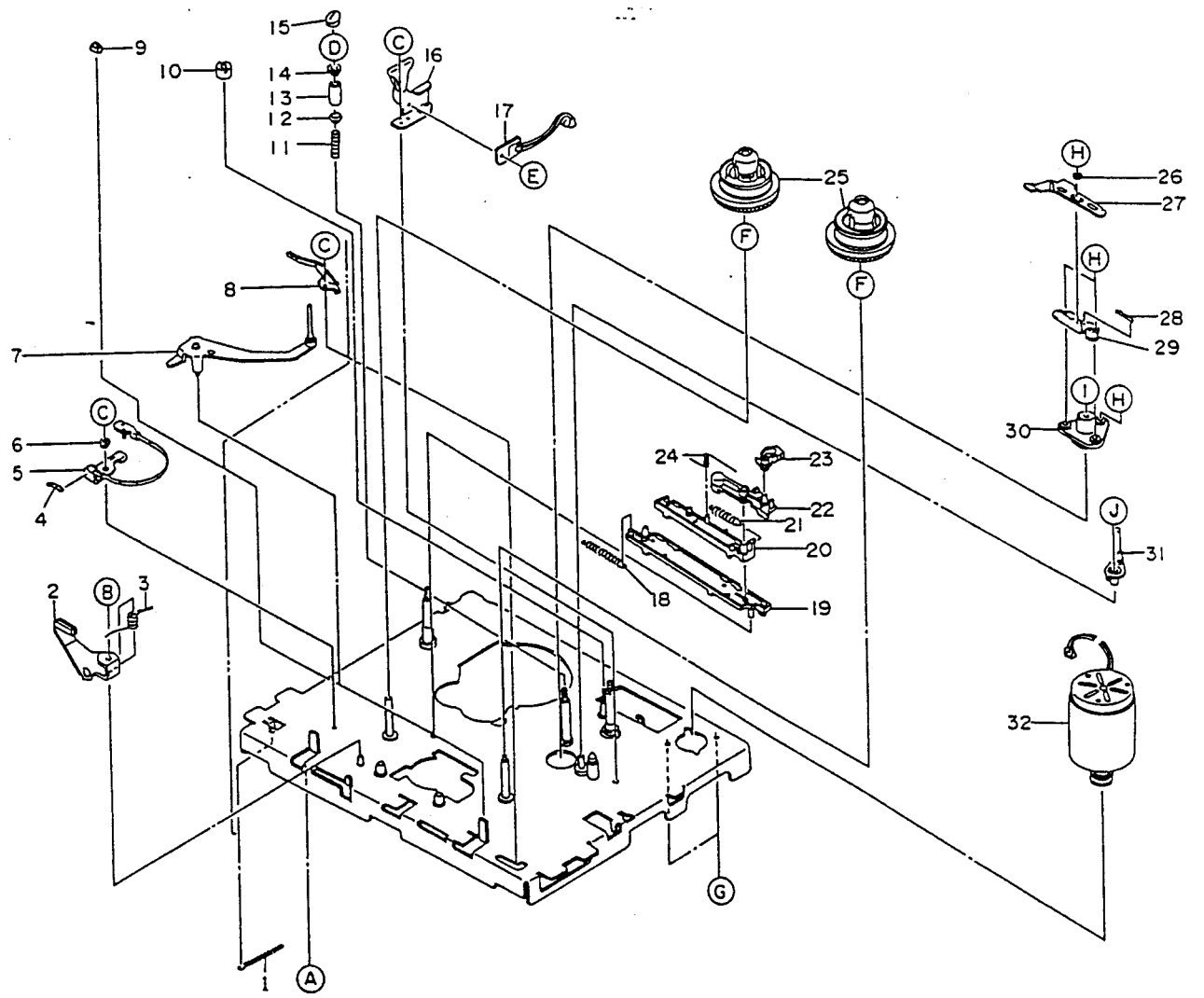
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	S9-665-000-000	CUP SCREW 2.6×3	E	S9-972-000-000	BIND TAMS SCREW 3×8	I	S9-205-000-000	C TAPPING SCREW 3×10
B	S9-192-000-000	C TAPPING SCREW 2.6×5	F	S9-973-000-000	W TAMS SCREW 2.6×6	J	S9-050-000-000	SCREW 2.6×2.0
C	S9-952-000-000	SET SCREW 2.0×3(PLANE)	G	S9-715-000-000	WASHER 2.6	K	S9-098-000-000	TAMS SCREW 2.6×6
D	S9-884-000-000	PW CUT 2.6×6×0.5	H	S9-552-000-000	SCREW(FOR CAMERA) 2×5			



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	2-1	*S8-059-013-090	CYLINDER ASSY		1
	2-2	S8-059-010-160	UPPER DRUM		1
	2-3	*S8-059-013-040	LOWER DRUM ASSY		1
	2-4	*S8-059-010-010	CYLINDER MOUNT		1
	2-5	*S8-059-010-230	DRUM EARTH		1
	2-6	*S8-059-010-020	DRUM EARTH BRACKET		1
	2-7	S6-004-090-010	MOTOR TM82		1
	2-8	*S8-059-030-060	T LOADING GEAR L		1
	2-9	*S8-059-030-080	LOADING GEAR SPRING L		1
	2-10	*S8-059-030-140	LOADING BOSS		2
	2-11	*S8-059-035-020	LOADING PLATE L SEMI ASSY		1
	2-12	*S8-059-030-040	LOADING BLOCK L		1
	2-13	*S8-000-030-370	ROLLER POST ST		2
	2-14	*S8-059-030-070	T LOADING GEAR R		1
	2-15	*S8-059-030-050	LOADING BLOCK R		1
	2-16	*S8-059-035-010	LOADING BASE SEMI ASSY		1
	2-17	*S8-059-035-030	LOADING PLATE R SEMI ASSY		1
	2-18	*S8-059-030-090	LOADING GEAR SPRING R		1
	2-19	---	CONNECTOR BRACKET		1

EXPLODED VIEW – 3

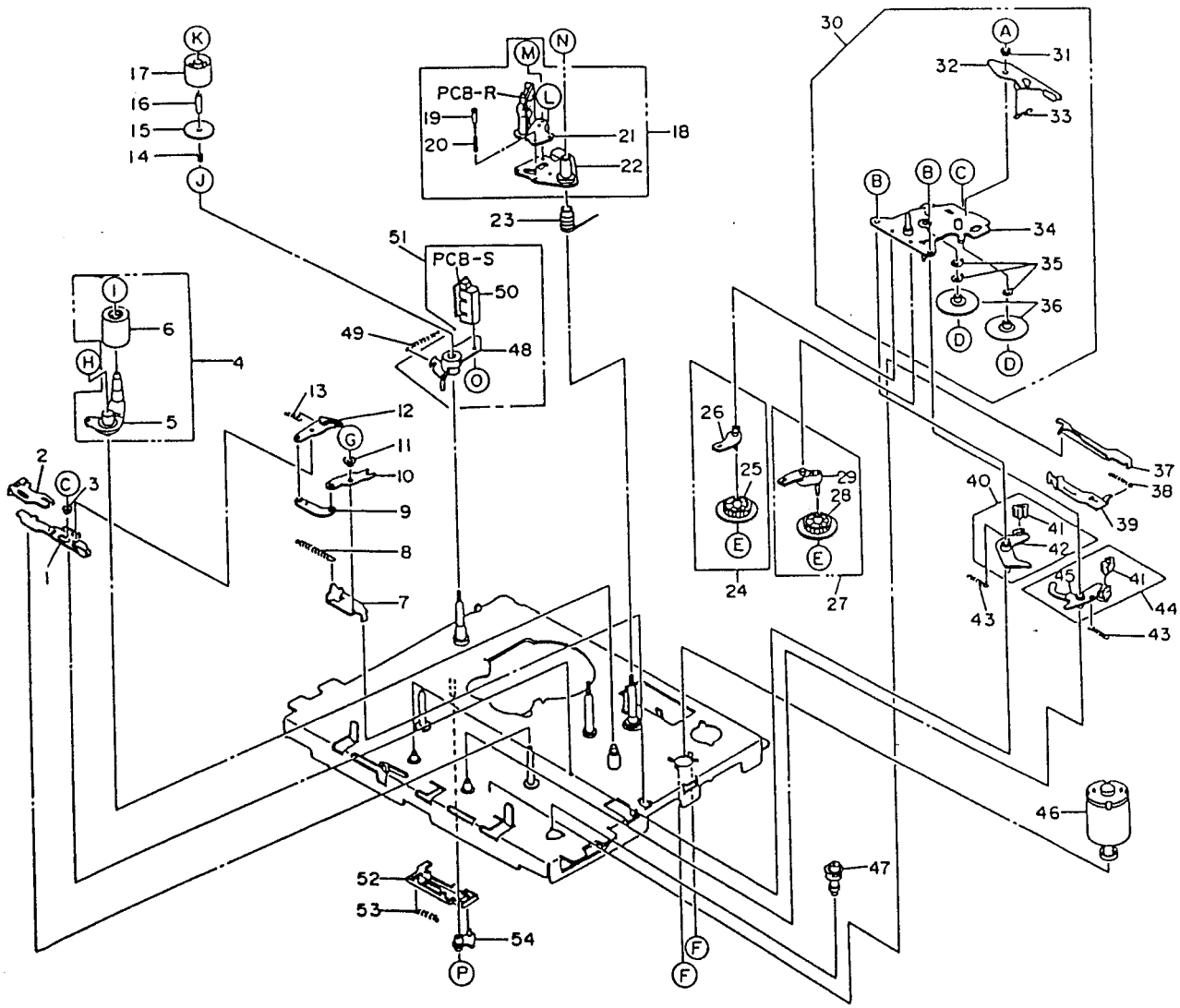
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	S9-999-030-150	PW CUT 2.1×4×0.5	E	S9-096-000-000	TAMS SCREW 2.6×4	I	S9-999-060-000	NYLON WASHER 2.92×5×0.5
B	S9-876-000-000	PW CUT 2.1×5×0.5	F	S9-912-000-000	PW 3.1×6×0.5	J	S9-884-000-000	PW 2.6×6×0.5CUT
C	S9-191-000-000	C TAPPING SCREW 2.6×4	G	S9-105-000-000	TAMS SCREW 3×4			
D	S9-453-000-000	NUT 3.0	H	S9-495-000-000	C TAPPING SCREW 2.6×8			



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q. TY
	3-1	*S8-059-080-200	BT ACTUATE PLATE SPRING		1
	3-2	*S8-059-103-040	S SOFT BRAKE ASSY		1
	3-3	*S8-059-100-220	S SOFT BRAKE SPRING		1
	3-4	*S8-059-080-170	BAND HOLDER SPRING		1
	3-5	*S8-059-083-020	BT BAND ASSY		1
	3-6	*S8-059-080-150	BAND HOLDER COLLAR		1
	3-7	*S8-059-085-010	BT ARM SEMI ASSY		1
	3-8	*S8-059-080-090	BACK TENSION SUPPORT		1
	3-9	*S8-059-020-230	DAMPER RUBBER		1
	3-10	*S8-059-020-290	TRACKING ADJUSTER		1
	3-11	*S8-059-020-260	TAPE GUIDE SPRING		1
	3-12	*S8-000-030-290	TAPE GUIDE FLANGE D		1
	3-13	*S8-000-030-140	TAPE GUIDE		1
	3-14	*S8-000-030-280	TAPE GUIDE FLANGE C		1
	3-15	*S8-000-030-190	GUIDE CAP		1
	3-16	*S8-059-023-010	OPEN ANGLE ASSY		1
	3-17	*S6-808-080-040	DEW SENSOR EYH-S10R		1
	3-18	*S8-059-100-100	BRAKE ACTUATE BASE SPRING		1
	3-19	*S8-059-100-090	BRAKE ACTUATE BASE		1
	3-20	*S8-059-100-110	BRAKE PLATE		1
	3-21	*S8-059-100-120	BRAKE PLATE SPRING		1
	3-22	*S8-059-100-130	TRIGGER LEVER		1
	3-23	*S8-059-100-140	TRIGGER HOOK		1
	3-24	*S8-059-100-230	TRIGGER LEVER SPRING		1
	3-25	S8-059-053-010	REEL ASSY		2
	3-26	*S8-059-170-100	RG SLIDE PLATE COLLAR		1
	3-27	*S8-059-170-030	RG SLIDE PLATE		1
	3-28	*S8-059-170-110	RG SLIDE SPRING		1
	3-29	*S8-059-170-090	RG SLIDE BASE		1
	3-30	*S8-059-073-010	METAL HOUSING ASSY		1
	3-31	*S8-059-175-010	RG ARM SEMI ASSY		1
	3-32	S8-059-073-020	CAPSTAN MOTOR ASSY		1

EXPLODED VIEW – 4

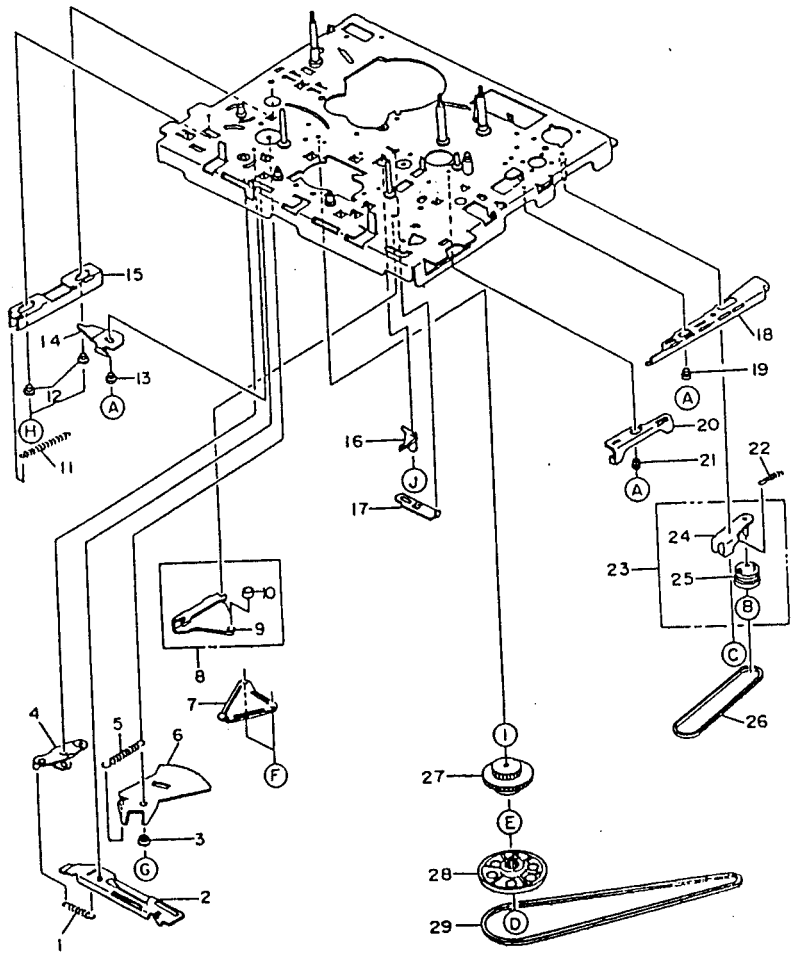
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	S9-974-000-000	SL FH SCREW 2×3	G	S9-096-000-000	TAMS SCREW 2.6×4	M	S9-705-000-000	LONG LOCK SCREW 2.6×7
B	S9-097-000-000	TAMS SCREW 2×4	H	S9-999-030-000	PW CUT 5×8×0.5	N	S9-953-000-000	NYLON NUT M3
C	S9-192-000-000	C TAPPING SCREW 2.6×5	I	S9-038-000-000	SCREW 2.6×4	O	S9-953-000-000	SCREW FLANGE 2×3
D	S9-500-000-000	E RING S1.5	J	S9-387-000-000	PLANE WASHER 3×8×0.5	P	S9-876-000-000	PW 2.1×5×0.5CUT
E	S9-743-000-000	PW CUT 1.6×3.8×0.3	K	S9-953-000-000	NYLON NUT M3			
F	S9-105-000-000	C TAPPING SCREW 3×4	L	S9-999-000-250	SCREW 3.6 (SHAPE TYPE)			



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q. TY
	4-1	*S8-059-060-240	P SLIDE PLATE A		1
	4-2	*S8-059-060-250	P SLIDE PLATE B		1
	4-3	*S8-059-060-180	COLLAR		1
	4-4	S8-059-063-010	PINCH ROLLER ARM ASSY		1
	4-5	*S8-059-065-010	PINCH ROLLER ARM SEMI ASSY		1
	4-6	S8-000-090-220	PINCH ROLLER A		1
	4-7	*S8-059-060-190	P ANGLE HOLDER		1
	4-8	*S8-059-060-200	P-SPRING,ROLLER		1
	4-9	*S8-059-060-060	JOINT PLATE		1
	4-10	*S8-059-060-050	P ACTUATE ANGLE		1
	4-11	*S8-059-060-180	COLLAR		1
	4-12	*S8-059-060-040	P ACTUATE ARM		1
	4-13	*S8-059-060-090	P-SPRING,ACTUATE ARM		1
	4-14	*S8-059-040-090	TAPE GUIDE FLANGE SPRING		1
	4-15	*S8-059-040-070	TAPE GUIDE FLANGE A		1
	4-16	*S8-059-040-060	IMPEDANCE ROLLER SLEEVE		1
	4-17	*S8-059-040-050	IMPEDANCE ROLLER		1
	4-18	*S8-059-043-080	HEAD BASE ASSY		1
	4-19	---	AZIMUTH SPRING SCREW		1
	4-20	---	AZIMUTH SPRING		1
	4-21	S6-204-150-060	ACE HEAD HV225211		1
	4-22	---	HEAD BASE SEMI ASSY		1
	4-23	---	HEAD SPRING		1
	4-24	*S8-059-093-050	P GEAR ASSY		1
	4-25	*S8-059-090-200	PLAY GEAR		1
	4-26	*S8-059-093-030	P GEAR ARM ASSY		1
	4-27	*S8-059-093-060	RF GEAR ASSY		1
	4-28	*S8-059-090-220	FF GEAR		1
	4-29	*S8-059-093-040	RF GEAR ARM ASSY		1
	4-30	*S8-059-093-070	SUB PLATE ASSY		1
	4-31	*S8-059-100-070	T SOFT BRAKE ARM COLLAR		1
	4-32	*S8-059-103-030	T SOFT BRAKE ASSY		1
	4-33	*S8-059-100-060	T-SPRING,SOFT BRAKE ARM		1
	4-34	---	SUB PLATE SEMI ASSY		1
	4-35	*S8-000-100-250	WAVE WASHER		3
	4-36	*S8-059-090-060	REEL DRIVE GEAR		2
	4-37	*S8-059-100-160	BRAKE LIFTER		1
	4-38	*S8-059-100-180	L BRAKE ACTUATOR SPRING		1
	4-39	*S8-059-100-170	L BRAKE ACTUATOR		1
	4-40	*S8-059-103-010	S BRAKE ARM ASSY		1
	4-41	*S8-059-100-190	BRAKE SHOE		2
	4-42	*S8-059-100-010	S BRAKE ARM		1
	4-43	*S8-059-100-020	BRAKE ARM SPRING		2
	4-44	*S8-059-103-020	T BRAKE ARM ASSY		1
	4-45	*S8-059-100-030	T BRAKE ARM		1
	4-46	S8-059-113-010	LM ASSY		1
	4-47	*S8-059-113-020	TRIGGER BEARING ASSY		1
	4-48	---	FE PLATE		1
	4-49	*S8-059-040-080	FE PLATE SPRING		1
	4-50	*S6-204-150-030	FE HEAD HVFMD 0006		1
	4-51	*S8-059-043-020	FE PLATE ASSY		1
	4-52	*S8-059-040-100	FE SLIDE PLATE		1
	4-53	*S8-059-040-120	FE ACTUATE SPRING		1
	4-54	*S8-059-040-110	FE ACTUATE LEVER		1

EXPLODED VIEW – 5

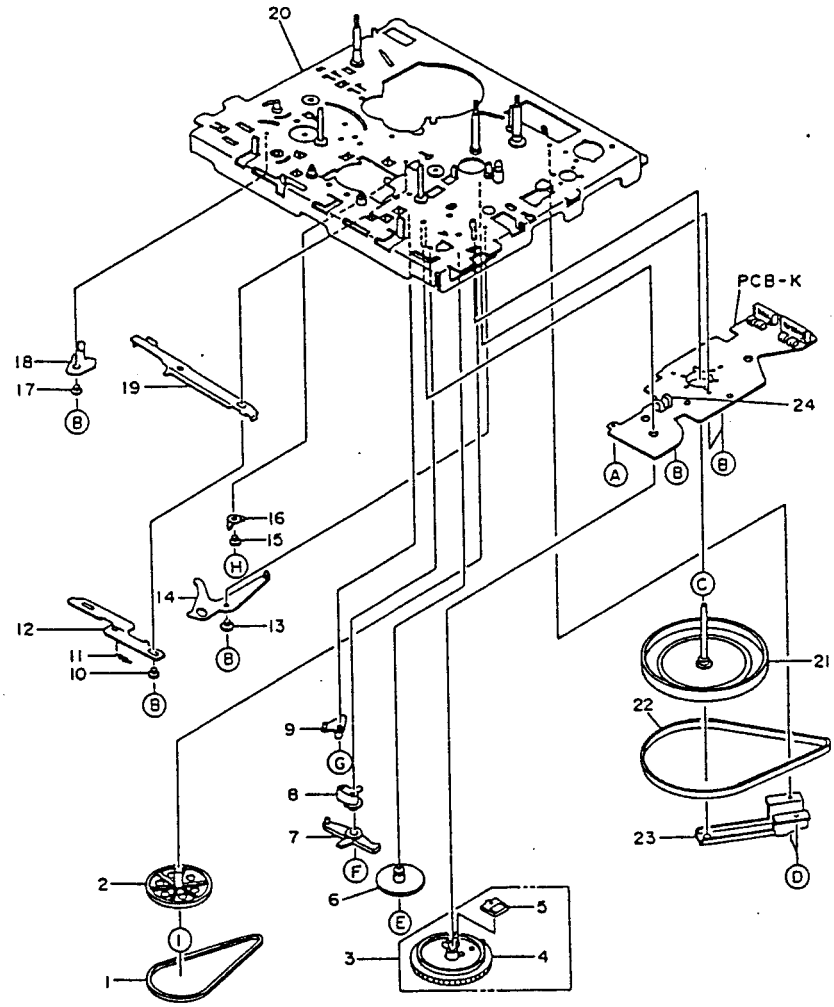
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	S9-192-000-000	C TAPPING SCREW 2.6×5	E	S9-999-060-040	NYLON WASHER 2.98×6×0.3	I	S9-853-000-000	NYLON WASHEER 3.1×6×0.3
B	S9-743-000-000	PW CUT 1.6×3.8×0.5	F	S9-078-000-000	TAMS SCREW 2×5	J	S9-876-000-000	PW CUT 2.1×5×0.5
C	S9-876-000-000	PW CUT 2.1×6×0.5	G	S9-203-000-000	C TAPPING SCREW 3×6			
D	S9-884-000-000	PW CUT 2.6×6×0.5	H	S9-840-000-000	S TAPPNG SCREW 2.6×3.5			



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	5-1	*S8-059-120-050	LOADING ACTUATOR SPRING		1
	5-2	*S8-059-125-030	LOADING ACTUATOR SEMI ASSY		1
	5-3	*S8-059-120-100	L GEAR PLATE COLLAR		1
	5-4	*S8-059-125-020	LOADING ACTUATE LEVER SEMI ASSY		1
	5-5	*S8-059-120-120	L GEAR PLATE SPRING		1
	5-6	*S8-059-120-090	L GEAR PLATE		1
	5-7	*S8-059-120-110	LOADING LEVER REINFORCE PLATE		1
	5-8	*S8-059-123-010	LOADING LEVER ASSY		1
	5-9	---	LOADING LEVER SEMI ASSY		1
	5-10	---	CAM ROLLER		1
	5-11	*S8-059-080-130	BACK TENSION SPRING		2
	5-12	*S8-059-080-210	BT ACTUATE PLATE COLLAR		1
	5-13	*S8-059-060-180	COLLAR		1
	5-14	*S8-059-080-180	BT ACTUATE LEVER		1
	5-15	*S8-059-080-190	BT ACTUATE PLATE		1
	5-16	*S8-059-170-010	RG ACTUATE ARM		1
	5-17	*S8-059-170-020	RG ACTUATE		1
	5-18	*S8-059-150-070	L BRAKE PLATE		1
	5-19	*S8-059-060-180	COLLAR		1
	5-20	*S8-059-150-080	EJECT ACTUATOR		1
	5-21	*S8-059-060-180	COLLAR		1
	5-22	*S8-059-150-110	IDLER ARM SPRING		1
	5-23	*S8-059-153-030	E IDLER ARM ASSY		1
	5-24	---	E IDLER ARM SEMI ASSY		1
	5-25	---	EJECT PULLEY		1
	5-26	S8-059-150-060	FL BELT		1
	5-27	*S8-059-093-020	CLUTCH ASSY		1
	5-28	*S8-059-093-010	MIDDLE PULLEY ASSY		1
	5-29	*S8-059-090-170	DRIVE BELT		1

EXPLODED VIEW – 6

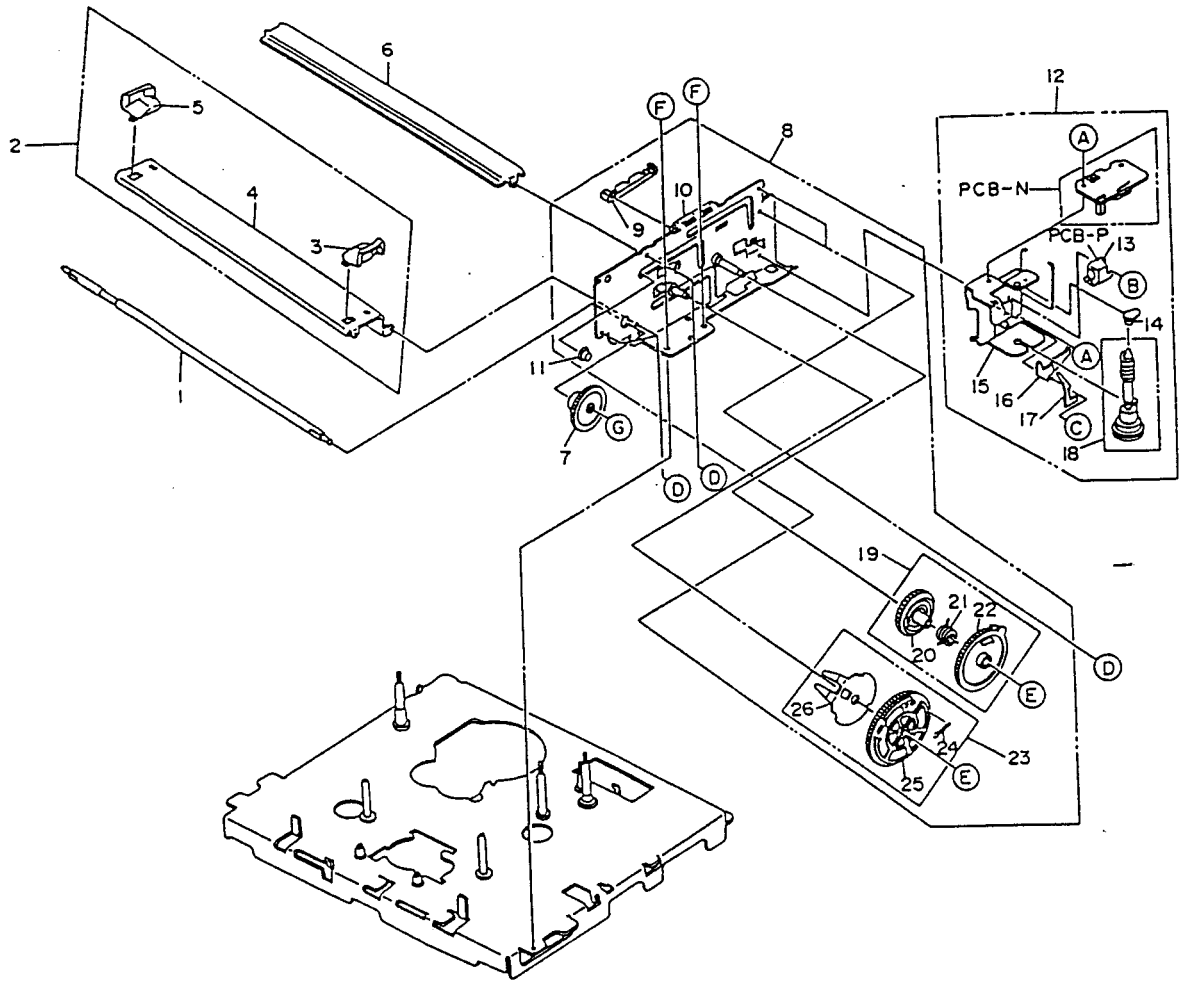
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	S9-671-000-000	S TAPPING SCREW 2.6×5	D	S9-202-000-000	C TAPPING SCREW 3×5	G	S9-884-000-000	PW CUT 2.6×6×0.5
B	S9-192-000-000	C TAPPING SCREW 2.6×5	E	S9-876-000-000	PW CUT 2.1×5×0.5	H	S9-999-180-100	C TAPPING FH SCREW 2.6×4
C	S9-912-000-000	PW 3.1×6×0.5	F	S9-999-030-100	PW CUT 2.6×8×0.5	I	S9-743-000-000	PW CUT 1.6×3.8×0.3



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	6-1	S8-059-110-060	LOADING BELT		1
	6-2	*S8-059-110-030	LOADING PULLEY		1
	6-3	*S8-059-113-030	LOADING CAM ASSY		1
	6-4	---	LOADING CAM		1
	6-5	---	S BRUSH		1
	6-6	*S8-059-110-040	LOADING GEAR		1
	6-7	*S8-059-110-140	EJECT ARM		1
	6-8	*S8-059-110-130	BRAKE ACTUATE ARM		1
	6-9	*S8-059-110-120	SEARCH ARM B		1
	6-10	*S8-059-060-110	P SLIDER COLLAR		1
	6-11	*S8-059-060-230	P-SPRING,SLIDER		1
	6-12	*S8-059-060-100	P SLIDER		1
	6-13	*S8-059-060-170	P CAM LEVER COLLAR		1
	6-14	*S8-059-065-020	P CAM LEVER SEMI ASSY		1
	6-15	*S8-059-060-130	P CRANK COLLAR		1
	6-16	*S8-059-060-120	P CRANK		1
	6-17	*S8-059-060-180	COLLAR		1
	6-18	*S8-059-080-230	BT RETURN LEVER		1
	6-19	*S8-059-080-100	BT CHANGE PLATE		1
	6-20	---	CHASSIS SEMI ASSY		1
	6-21	*S8-059-070-140	FLYWHEEL CAPSTAN		1
	6-22	S8-059-070-100	MAIN BELT		1
	6-23	*S8-059-073-030	FL ANGLE ASSY		1
	6-24	*S6-808-080-030	REEL SENSOR		1

EXPLODED VIEW – 7

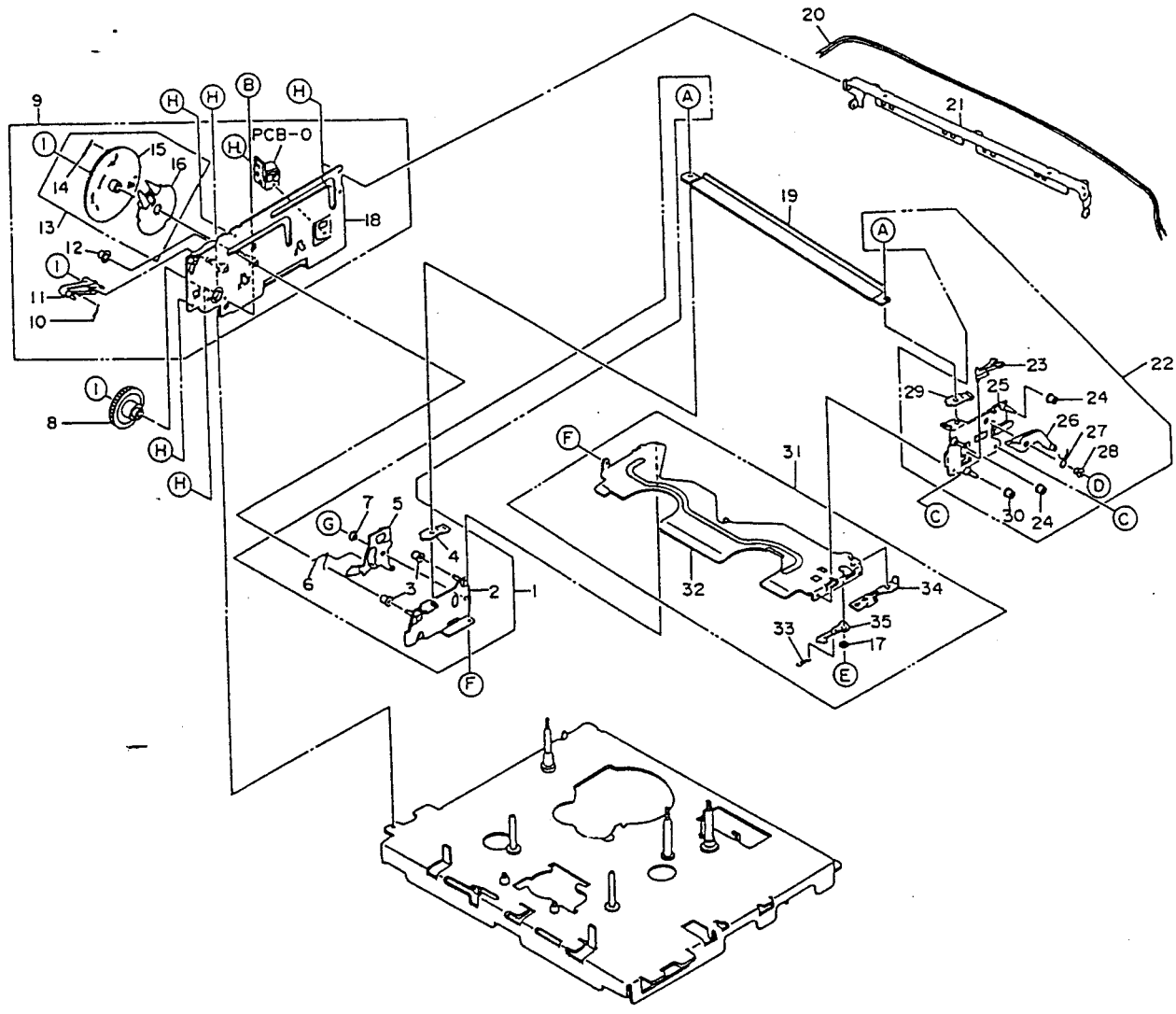
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	S9-096-000-000	TAMS SCREW 2.6×4	D	S9-096-000-000	TAMS SCREW 2.6×4	G	S9-504-000-000	E RING S2.5
B	S9-078-000-000	TAMS SCREW 2×5	E	S9-504-000-000	E RING S2.5			
C	S9-743-000-000	PW CUT 1.6×3.8×0.3	F	S9-192-000-000	C TAPPING SCREW 2.6×4			



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	7-1	*S8-059-160-600	SYNCHRONIZE SHAFT		1
	7-2	---	FRONT ANGLE ASSY		1
	7-3	*S8-059-160-250	TAPE GUIDE R		1
	7-4	*S8-059-160-180	FRONT ANGLE		1
	7-5	*S8-059-160-240	TAPE GUIDE L		1
	7-6	*S8-000-220-070	UPPER PLATE		1
	7-7	*S8-059-160-170	SYNCHRONIZE GEAR A		2
	7-8	*S8-059-163-220	FRAME R ASSY		1
	7-9	---	OPEN LEVER GUIDE		1
	7-10	---	FRAME R SEMI ASSY		1
	7-11	---	GUIDE SLEEVE		1
	7-12	*S8-059-163-180	C LOAD BRACKET ASSY		1
	7-13	---	SENSOR P.C.B RM ASSY		1
	7-14	---	F WORM BEARING A		1
	7-15	---	C LOAD BRACKET SEMI ASSY		1
	7-16	---	IN SW LEVER		1
	7-17	---	S SW LEVER		1
	7-18	*S8-059-163-190	F LOADING CLUTCH ASSY		1
	7-19	*S8-059-163-210	WORMWHEEL ASSY		1
	7-20	---	FRICTION GEAR		1
	7-21	---	FRICTION SPRING		1
	7-22	---	WORMWHEEL		1
	7-23	*S8-059-163-120	LIFT GEAR R ASSY		1
	7-24	---	LP SPRING		1
	7-25	---	LIFT GEAR R		1
	7-26	---	LIFT ARM		1

EXPLODED VIEW – 8

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	S9-833-000-000	SCREW 2.3×2	D	S9-967-000-000	SL SCREW 2×4	G	S9-966-000-000	SL SCREW 2×2.5
B	S9-192-000-000	C TAPPING SCREW 2.6×4	E	S9-968-000-000	SL SCREW 2.6×3	H	S9-096-000-000	TAMS SCREW 2.6×4
C	S9-556-000-000	SCREW 2.6×3	F	S9-991-000-000	SCREW 2.3×2.5	I	S9-504-000-000	E RING SZ.5



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	8-1	*S8-059-163-090	SIDE PLATE L ASSY		1
	8-2	---	SIDE PLATE L SEMI ASSY		1
	8-3	---	GUIDE ROLLER		2
	8-4	---	CASSETTE PUSH PLATE		1
	8-5	---	C LCOK PLATE L		1
	8-6	---	LOCK PLATE SPRING L		1
	8-7	---	LOCK PLATE COLLAR		1
	8-8	*S8-059-160-170	SYNCHRONIZE GEAR A		2
	8-9	*S8-059-163-130	FRAME L ASSY		1
	8-10	---	LIFT LEVER SPRING		1
	8-11	*S8-000-220-760	LIFT LEVER		1
	8-12	---	GUIDE SLEEVE		1
	8-13	*S8-059-163-140	LIFT GEAR L ASSY		1
	8-14	---	LP SPRING		1
	8-15	---	LIFT GEAR L		1
	8-16	---	LIFT ARM		1
	8-17	---	COLLAR		1
	8-18	---	FRAME L SEMI ASSY		1
	8-19	*S8-000-220-650	TOP STAY		1
	8-20	---	END SENSOR WIRE		1
	8-21	*S8-059-160-090	REAR ANGLE		1
	8-22	*S8-059-163-080	SIDE PLATE R ASSY		1
	8-23	---	LOCK RELEASE LEVER		1
	8-24	---	GUIDE ROLLER		2
	8-25	---	SIDE PLATE R SEMI ASSY		1
	8-26	*S8-000-220-250	OPEN LEVER		1
	8-27	---	OPEN LEVER SPRING		1
	8-28	---	OPEN LEVER COLLAR		1
	8-29	---	CASSETTE PUSH PLATE		1
	8-30	---	GUIDE ROLLER		1
	8-31	*S8-059-163-060	CASSETTE HOLDER ASSY		1
	8-32	---	CASSETTE HOLDER		1
	8-33	---	LOCK SPRING		1
	8-34	---	SLIDE PLATE		1
	8-35	---	C LOCK PLATE A		1